UPDATED REPEATER INDEXES — NC, SC, VA, WV, TN, KY, GA, MS INSIDE!

REPEATER JOURNAL

SouthEastern Repeater Association, Inc.

May
1990
2.50

Antenna Raising Time of the Year!

In This Issue:

* 8 State Updated Repeater Index
* 1990 Hamfest Calendar
* The FCC No-Code Proposal
* VEC Licensing — The Story

Representing Coordination and VHF/UHF Interests Throughout North Carolina, South Carolina, Virginia, Tennessee, West Virginia, Kentucky, Georgia and Mississippi.

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DJ-160T&DJ-460T

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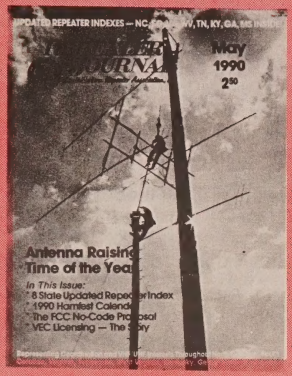

With the coming of warm weather it is time to work on those antenna systems. With Hugo last fall, tornadoes, heavy winds, ice storms, and all the other adverse elements over the past year, lots of arrays are in need of extensive repair. There are many new systems going up these days. (Color Slide from SERA Journal files)

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REPEATER JOURNAL

NATIONAL AWARD WINNER

SOUTHEASTERN REPEATER ASSOCIATION — SERA — MEMBER

· SouthEastern Repeater Association, Inc.

May, June, July 1990
Volume 19, No. 2
ORGANIZED IN 1971
"In Our 19th Year"

Editorial Comment

Nifty New Club Program Ideas!

It's been the same old story for years. Clubs struggling for a program session at the monthly meeting. We've had policemen, firemen, weathermen, TV personalities and everything else imaginable.

How about Amateur Radio training sessions! That's right, special sessions about certain facets of Amateur Radio, put on by a club member who might be the resident "expert" in such matters.

We can think of hundreds of subjects. . . "How to hook up your new 2-Meter rig," "Tuning your mobile antenna," "Using proper Jargon on the repeater," "Proper deviation on your FM radio," "The difference between deviation, audio and RF," and many others.

If you've been around the bands a while like I have, you have to be getting kind of worried at what you are hearing. We hear distorted, weak, noisy, overdeviated, echo-like, audio signals all over the band and on our repeaters. This isn't a run of bad 2-Meter radios. It's a run of operators AND repeaters who need just a bit of tuneup.

That's right! I said repeaters! Many repeaters are not suppressing audio, and are cranked up a full 5 Khz and greatly overdeviate when someone hits it with a strong audio.

I am also hearing much bad information passed on the fellas who ask for signal or audio reports. I hear audio that should be taken off the air immediately being referred to as "great sounding strong audio" by someone. I hear people tell other people, "your audio is dropping out," when actually he was so weak in the repeater his carrier was dropping out. The poor fella is probably still trying to figure if his mike cable is broken or what.

We have Amateurs who have advanced to the top of the ham ranks, but are at the bottom as far as everyday operation is concerned. We have those who cannot hook up their new rig to a battery, or wire it to a cigarette lighter in the car. They cannot install a mobile antenna and diagnose if it is having a problem, or the rig isn't working.

It's not really these Amateurs' fault they don't know this. There just isn't much discussion on this much any more. All the technical stuff has been taken out of Amateur radio, and reduced operation to removing the part from the box, plugging it in, and if it doesn't work, sending it back.

Clubs could do a great service to their members by getting classes started in the form of seminars, programs, etc. Each of these sessions could take a small item of importance, lead by someone who is knowledgeable and give the "new" club members a great service.

This is what Amateur radio is all about, sharing of information, teaching, training, helping, communicating and educating.

Let's start in the club. It doesn't have to be a finger-pointing or embarassing situation to anyone. Let the sessions be for ALL members. Those that need it can learn, others can refresh their memory. The "experts" can monitor, and plan on a session of their own.

Clubs who sponsor Amateur Radio classes should begin to incorporate operating practices in their classes, not just the bare bones stuff needed to pass the test, but the good stuff which will help the class after they get their license. Stuff that will help them get on the air, and ease their burden of learning proper operating procedures.

We're going to try to do our part in the Repeater Journal. With this issue, we're starting a column called "Coach's Corner."

You resident experts are invited to write in your little session and we'll publish it under the column and your name. Putting on RF connectors, proper grounding, wiring polarity, antenna tuning, SWR measuring, good audio on FM, etc., are just a few things we could cover. Send your items to the Journal Editor. Let's start now, getting our "new" hams orientated now!

— Wayne C. Williams, K4MOB
Editor/Publisher

Support SERA and Get The Journal
Only $6.00 a Year

REPEATER JOURNAL

May, June, July 1990

In This Issue

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Give a Gift of News & Information! Give an Associate Membership to your best friend and let him join the many Repeater Journal readers. Fill out the Application with his call, name and address and send it to us with $6.

About Associate Membership

Repeater users and Amateurs are invited to join SERA as Associate Members. A membership fee of $6.00 per year will enable members to support the organization and receive the "Repeater Journal". Associate Membership deadlines are on the 15th of the month preceding months of publication — Jan. 15, April 15, July 15 and October 15. Persons joining or renewing their membership must have their application into the Winston-Salem Post Office Box by these deadlines to receive the next upcoming Repeater Journal in February, May, August and November. Memberships received after any deadline will not receive next to be published Journal, but instead will receive the forthcoming issue the following quarter. HOT-P Associate Memberships are limited to one year duration at $10.50 per year. HOT-P, your Journal is mailed on Friday FIRST CLASS mail. Regular memberships are mailed on MONDAY, Third Class Bulk. SERA does not issue receipts for Membership applications. Members should wait until next Journal comes out to report any problems to the Associate Membership Chairman, P.O. Box 215, Tobaccoville, N.C. 27050-0215. Associate Members may hold appointive positions within SERA.

About Full Repeater Membership. . .

Officers and Directors are elected from repeater representatives who are Full Members. Any repeater owner or club may join SERA as a Full Member if they have an operable repeater on the air. Full Membership application, coordination information (if not on file) and $15.00 should be submitted for the annual Full Membership fee. Two Full Members receive the Journal from each application. The Full Member repeater is also appropriately recognized as a SERA supporter in the repeater index. Full Memberships all expire on December 31 of each calendar year.

About the Repeater Journal. . .

The SERA REPEATER JOURNAL is published quarterly, during the months of February, May, August and November of each year and mailed free to members of Southeastern Repeater Association, a seven state repeater coordinating organization made up of repeater owners and users. Permission is granted for use of material contained in the REPEATER JOURNAL provided proper credit is given. The REPEATER JOURNAL Editor will swap newsletters with other Repeater Councils and News organizations upon written request. DEADLINES: Ad space reservations are the 20th of the month, and ad copy due the 1st of the next month. ONE MONTH prior to publication. News deadlines are the first of the month prior to publication month. The REPEATER JOURNAL is entered as Third Class Mail at the Post Office in Greensboro, N.C. Cover price for the REPEATER JOURNAL is $2.50. All news and Newsletter exchanges should be mailed to the editor: Wayne C. Williams, K4MOB, 600 Lakedale Road, Colfax, N.C. 27235.

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The Southeastern Repeater Association, Inc. is one of the largest, well known, and most respected non-profit Repeater Coordination Councils in the United States. SERA territory covers over 1,300 repeaters in member States of North Carolina, South Carolina, Virginia, Tennessee, West Virginia, Kentucky, Georgia and Mississippi. In our 19th year, our goal continues to serve the repeater owners and users of our area, and provide a pleasant operating condition in the VHF/UHF spectrum of Amateur Radio through Coordination and Communication.

Coach's Corner Is New Feature of the Journal

Beginning with this issue, we will begin a new feature in the Repeater Journal. Scattered throughout the magazine will be little short stories, some technical, some informational, but they will all be designed to help the newcomer to VHF/UHF. These little stories will be designed to answer questions that no one bothers to answer, and you generally are afraid to ask.

If you would like to participate in the "Coach's Corner," send your items to the Repeater Journal editor. Be sure to label your story "Coach's Corner" material. Keep your stories as short as possible, generally no more than one typewritten page, double spaced. Include your name and callsign, and we will give a byline credit.

The Coach's Corner stories should be simple, everyday items or solutions to problems we hear or encounter everyday. We do not plan to get into any deep technical writing. If you have diagrams in your story, they must be on a separate piece of paper drawn in black ink, exactly as you wish them to appear. We will not redraw, or draw art for anyone; please don't ask. We can resize on our system as necessary, if you provide a clean, black and white drawing.

Send us your short items for "Coach's Corner" now! We can use all you can dream up. Let's help the newcomers along with your ideas, time savers, hints, and suggestions.

From Novice To Extra In Two Months

— by Dave Nicholson, N4VMB

How many of you remember struggling with CW? Trying to get the speed up enough to pass the 5 WPM test for your Novice ticket, and getting past the 10 WPM "plateau" on the way to General?

There's a lady from Fenwick, West Virginia who passed her Novice test last November, then passed the Technician and General written tests, 13 WPM and 20 WPM CW tests at one sitting in February, then on March 31st, passed the Advanced and Extra written tests.

This amazing feat was pulled off by Nora Woods, N8MBP of Fenwick. (She will be getting her Extra call soon.) Nora is the oldest of five children of Dorotha and Delbert Talbert of Low Gap, N.C.

Dorotha, N4SHE and Delbert, AB4TH became hams about 2 years ago. The couple promised a station set-up for any of their children or grandchildren who got their ham ticket. Nora's son, Paul, N8LHT got his Novice and Technician tickets last summer, while visiting his grandparents and received a 2-meter rig. Paul has passed the General written and will have passed the CW test by the time you read this.

Nora, a secretary for Hewitt Motors in Richwood, W.V., who incidentally types at a blazing 90 WPM, now has a Kenwood 430 and several dipole antennas, thanks to mom and dad. She is active on several HF bands now.

Full Membership Maintains Steady Growth for Year

SERA Full Membership, for repeaters and repeater owners maintains a steady growth as the year progresses. At present we are running on track to exceed last year's all-time record figures before the year is out.

Presently through April 13, we have 678 Full Member repeaters in our 8 Districts. This compares with a total of 717 for 1989 end. We picked up 94 more members between the February Journal and this issue. Another increase like that between now and August will put us over the top.

North Carolina continues their lead in total numbers of repeater members with 154, compared with 181 at the end of 1989, for 67.5% membership. Virginia is running their usual second in total numbers, and usual first in percentage. They have 119 repeater members for 70.4%. At year's end in 1989, Virginia had 151 member repeaters. Repeaters in Northern Virginia, within T-Marc coordination territory are not counted in the totals of Virginia repeaters.

Our 2 new districts are doing well. As of now, Mississippi has 37.2% and Kentucky 45.0% membership of their total repeaters.

Overall, SERA oversees 1339 repeaters, of which 678 are Full Member. See the chart below for full breakdowns. In our Repeater Index, Full Member repeaters are identified with an asterisk.

You are encouraged to check to see if the repeater you support is a SERA Member. If not, encourage them to join!

SERA FULL MEMBERSHIP-1983 TO DATE Correct thru #443 4-13-90

STATE	FINAL 1983	FINAL 1984	FINAL 1985	FINAL 1986	FINAL 1987	FINAL 1988	FINAL 1989	CURR 1990	1990 MBR %	STATE RPTRS
N.C.	100	83	149	147	123	145	181	154	67.5%	228
S.C.	24	35	56	43	44	46	59	47	51.1%	92
VA.*	58	60	92	88	98	99	151	119	70.4%	169
W.VA	28	21	41	40	51	39	51	53	54.6%	97
TENN.	47	58	85	63	80	80	111	108	38.8%	286
GA.**	9	18	109	125	110	100	104	117	45.0%	260
KY***	1	4	18	21	19	15	48	48	39.7%	121
MISS***	--	--	--	--	--	3	12	32	37.2%	86
TOTALS	268	280	554	598	532	527	717	678	50.6%	1339

* Total Virginia list does not include 69 repeaters which are included-T-MARC territory, North of Highway 33 and Latitude 38-deg.North. Also 4 repeaters in the West Virginia Panhandle area, which are T-MARC.
** GA assumed SERA District Status in mid-1985.
***EKY assumed SERA District Status in 1985, Western Ky in late 1989. District renamed Kentucky (KY) District.
***MS assumed SERA District Status in late 1989.
++ AL is not a SERA District

FAR Scholarships

THE FOUNDATION FOR AMATEUR RADIO, INC., a non-profit organization with headquarters in Washington, D.C., plans to award thirty-three (33) scholarships for the academic year 1990-1991 to assist licensed Radio Amateurs. The Foundation, composed of fifty local area Amateur Radio Clubs, fully funds five of these scholarships with the income from grants and its annual Hamfest. It administers, without cost to the donors, seven (7) scholarships for the Quarter Century Wireless Association, three (3) each for the Baltimore, (MD) Amateur Radio Club, the Radio Club of America, and the West Allis Radio Club of Milwaukee, (WI) and two (2) each for the Dade (FL) Radio Club, the Amateur Radio News Service, and the 10-10 International Net. It also administers one (1) each for the Richard G. Chichester Memorial, the Young Ladies' Radio League, the Columbia (MD) Amateur Radio Association, the Frederick (MD) Amateur Radio Club, the Vienna (VA) Wireless Society, the Goddard Amateur Radio Club and the Kevin B. Perdue Memorial.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. Some of the scholarships require the holding of at least an FCC GENERAL Class license or equivalent. The awards range from $500 to $2000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Additional information and an application form can be requested by letter or QSL card, postmarked prior to May 31, 1990 from: FAR Scholarships, 6903 Rhode Island Avenue, College Park, MD 20740

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purpose of the Amateur Radio Service.

Winston-Salem Hamfest, Computer & Electronics Fair

Saturday, June 9, 1990 9:00 AM - 3:00 PM

New, totally indoor AIR CONDITIONED location!

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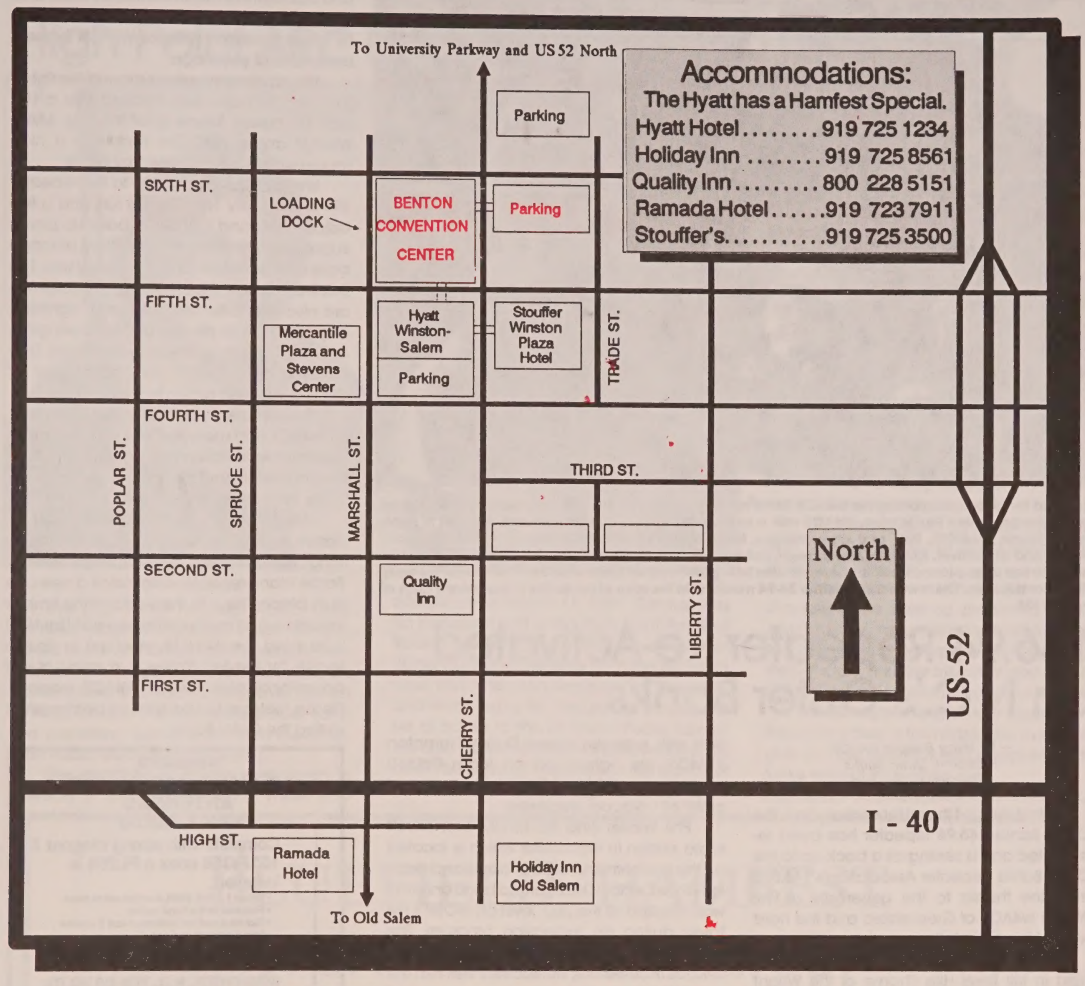

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_____	Fleamarket 8 ft tables @ $10.00 each	$_____
	TOTAL	$_____

Make checks payable to:
Forsyth Amateur Radio Club

Mail along with SASE to:
Winston-Salem Hamfest
PO Box 11361
Winston-Salem, NC 27116

Pre-registrations without SASE or received after May 25, 1990 will be held at the door.

On hand for for commissioning the W4ACY 34-94 repeater were members of the Outer Banks Repeater Assn, who presented Phil Wicker, W4ACY with a certificate of appreciation. Pictured, top, left to right, Dewey Mann, WA4NYN, Phil, and Harry Bridges, K4UOR. Bottom, Glenn Campbell, KB4SAL, Bill Earl, N4JXG and Al Schriver, KA5VZG. Also present, but busy taking the picture was Joe Miller, WB4ZJP. The machine has been placed back in operation after being off the air for some time. 34-94 was on in the early 1973 era at Aurora. There was also another 34-94 machine in the area at Beulaville in those early days of 2-meter FM.

146.94 Repeater Re-Activated on N.C.'s Outer Banks

— by Harry Bridges K4UOR
President, Outer Banks
Repeater Association

After being off the air for several years, the Outer Banks 146.94 repeater has been re-activated and is serving as a back-up to the Outer Banks Repeater Association's 146.835 machine thanks to the generosity of Phil Wicker W4ACY of Greensboro and the hard work of the Association.

During an October Area One EC meeting held in Kill Devil Hills (home of the Wright Brothers' Flight), members of the Outer Banks Repeater Association were discussing the devastating results of hurricane "Hugo." Dewey Mann WA4NYN remarked on the vulnerability of repeaters to such storms and other inclement weather. Several repeaters went down during "Hugo," and even after our October discussion, several more repeaters went down during an ice storm.

The general consensus of the Association was that we needed a back-up repeater on the Outer Banks, but just didn't have the resources to purchase one at that time. As fate would have it, Phil Wicker W4ACY visited the Outer Banks in November and told me that he would like to make a donation to our association (of which he is a member) and wanted to know what we needed. I told Phil of the discussion that took place at the EC meeting and the need we saw for a back-up repeater.

After initially hearing of our need, Phil asked me to put together a proposal and present it for approval to both he and the Association. After a lot of research and discussion with repeater expert Danny Hampton KM4OX, we agreed on an Icom RP1510 repeater, and RC85 ACC controller and a set of WP 641 Wacom duplexers.

Phil Wicker and his family own WOBR radio station in Wanchese which is located on the southern end of Roanoke Island. Back in 1981, a Decibel DB224 broad band antenna was installed at the 250' level on WOBR's FM tower during an expansion program. The DB224 is not being used at this time by WOBR and, as it turned out, worked very well with the new 146.94 repeater.

Phil and his staff at WOBR also made space for the repeater in a tuning shack located at the base of the tower, a "turn key job," you might say!

Phil was instrumental in putting the W4PCN 146.94 repeater on the air two decades ago and has kept the 146.94 frequency listed and its dues paid to SERA since it was taken off the air when Goodrich Williams W4PCN passed away several years ago.

The equipment arrived around the first of January ('90) and was installed into a 19" rack by Dewey Mann WA4NYN, Joe Miller WB4ZJP and myself. The rack was a nice model which was surplused by WOBR.

We took the equipment to the repeater site on January 16 for a trial run and a few adjustments and installed a back-up power supply consisting of a heavy battery, a battery case and about 15' of good heavy wire. The back-up power supply works perfectly! We are also very fortunate to have a "lightning engineer" in the person of Don Covington, owner of Lightning Diverter Systems, Inc. Don surveyed the repeater site and helped us install a lightning protection system.

The repeater was officially commissioned by W4ACY and members of the Outer Banks Repeater Association on February 20 and is working well. In fact, our coverage has been better than expected.

Now that the Outer Banks Repeater Association has its new back-up repeater operational, we have plans to overhaul the 146.835 Bodie Island repeater or to install a new one in its place. This is in the works at the time of this piece and our number one goal for 1990 is to have the 146.835 machine in tip-top shape by the fall. Below is a copy of our operational plan for the W4ACY repeater. Please feel free to use either repeater when visiting the Outer Banks.

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5/8 WAVE MAG. MOUNT ANTENNAS
ONLY $25.00

Complete with strong magnet & 15" RG58 coax a PL259 is installed.
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- Can be tuned for business band & marine frequencies on request
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High Point ARC Donates Books

— by Mark McMahan

The High Point Amateur Radio Club (HPARC) recently donated a set of ARRL books to the Archdale Public Library. At their February 5th meeting, HPARC president, Bill Borten, presented Susan Coltrane with the set of ARRL books. The twenty-five books (and two cassettes) donated are from the American Radio Relay League (ARRL).

The donation of books were given in memory of George L. Marshall, WQ4K who passed away March 17, 1987. George was an important part of the High Point Amateur Radio Club and always helpful to other Ham Radio operators. He grew up in the Archdale area, which he often referred to as "Bush Hill," and which led to the decision to donate the set of books to the Archdale Public Library. The club hopes that this donation will lead to others becoming interested in the hobby of Amateur Radio that George loved so much.

Our Indexes Have Changed!

You'll notice quite a difference in our Repeater Index this issue. The SERA Journal Staff finally came up with a space-saving way to present the listings without degradation of readability.

David Ward, KA4LVO worked it out on the new desktop publishing system we have installed on the SERA computers.

He said it takes a while to bring the massive file and flow it into the pages and format it, but overall the job is faster, because the HP Laserjet prints the DTP format faster than the old format straight from the SERA Database. There is considerable time saved in trimming and pasteup, too.

Wayne Williams, K4MOB, editor of the Journal said he was pleased at the appearance of the new indexes.

"I'll have to admit," he said, "David has kind of made a believer out of me and this desktop publishing."

He said that he didn't anticipate a great changeover to desktop publishing on the Journal, but some key areas which have been very expensive to get typeset will naturally go the DTP route. We have also changed over the VEC Examination Schedule and the Hamfest.

We still expect to keep our typesetter at the printers busy in the near future, but DTP will give us more versatility and capability in the future without increasing cost.

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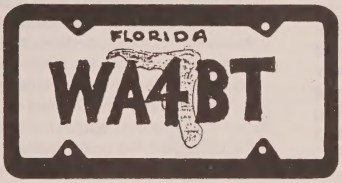

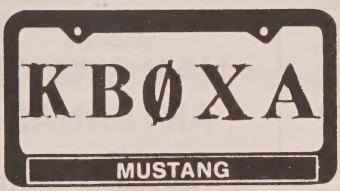

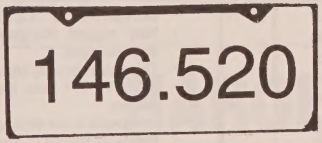

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Where Do The Question Pools Come From?

— by Ray Adams, N4BAQ
Chairman, Question Pool Committee

The entire environment of amateur radio license examinations has been totally restructured by deregulation. I know that is not the first time you have heard the term, but it may be the first time you have heard it applied to amateur radio testing. What it really means is that our government is going to lessen their active participation in, and usually at least a small amount of their control over, the function in question. There appears to be little doubt that this has happened in the test room. The task of licensing the Amateur Service at one time consumed the efforts of 35 full time civil service federal employees. Today, that number is two and a half, with ready, capable volunteers filling in to the point that all agree it is being accomplished better than the government could do it themselves.

Many of us have known for years that dedicated volunteers who are working for the satisfaction of seeing the task at hand accomplished in the manner they believe it should be done will out-perform any paid employee. This should not be interpreted as a reflection on the employees the FCC had, or still have. I've found the staff in both Washington and Gettysburg to be intelligent, capable people, quite well qualified for the performance expected of them. The difference is, they quit at 5:00 PM and on Friday afternoon. They aren't to be blamed for this, as the 40 hour week has long been accepted as a fair day's work. They have paid their economic dues and are entitled to R&R on the weekends and evenings just as you and I are. As a matter of fact, at least some of them hamfest regularly on the weekends, and I can relate to that, too! The volunteers don't quit because of a clock — you see, they are working at the task at hand only because they enjoy doing it in the first place; now don't go suggesting there is even such a thing as a quitting time when they're having fun.

The Novice test has been administered for years by volunteer examiners selected from among the general or higher class licensees by the applicant. As a matter of fact, at one time that same general or higher class licensee could adminster the Technician class examination as well. I suppose the FCC had good reason to retract that authority. It happened at a time when I was paying little attention to amateur radio and I've never heard anyone complain about losing that privilege in the manner of the uncounted statements from untold sources in relation to the restriction of privileges involved with incentive licensing! This would lead me to believe that a change affecting a substantial portion of the amateur community will be accepted by the members of that community if it is clearly in the best interest of amateur radio.

With that background, the FCC was not totally without experience in delegating the authority of administering amateur examinations to licensed amateurs, and had no doubt learned much from their mistakes of the past.

Faced with annual automatic reductions in congressional budget allocations, the atmosphere of deregulation became the way to go, as it escorted the golden goose of a lessened funding requirement. The case of volunteer examining got a rude jolt in the form of an attorney's opinion (in the Justice Department, as I remember, too) to the effect that the FCC did not have the authority to delegate the administration of amateur testing at any level, even down to and including the performance of prior years in the case of Novice and even Technician class licensees who may well be still operating daily!

That may have been the straw that broke the camel's back and caused the FCC to approach congress, ask for, and get, an amendment to the Communications Act specifically authorizing them to use "unpaid employees" in the process of both preparation and administration of amateur license testing. That legalized the Novice testing program in use at the time. But wait — that was not all — not by a long shot. The FCC announced that 1984 would be the last year in which they would administer amateur license testing at any level, that they had the intention of entering into agreements with entities to serve as "Volunteer Examining Coordinators" (VEC's) who would screen and accredit the examiners, chosen from among the advanced and extra class licensees only, who would be authorized to administer the test for any amateur license higher than novice class. Deregulation had arrived in amateur radio. It sneaked right up on us.

The ARRL, our only national Amateur Radio organization, saw a major defect in the FCC's position so far as ARRL participation was concerned in that there was no provision for financing the program from any source. Even if volunteer labor is used at all levels, there is still printing, postage, a certain amount of unavoidable telephone toll charges, and other expenses that simply must be paid from somewhere. The ARRL could not even depend on volunteer labor to operate the VEC they would have to establish to coordinate any effort they might organize in that direction, so those people would have to be paid employees. Their board of directors responsibly refused to enter the program until the environment was altered to one in which they felt they could financially survive. The result was another plea in the halls of Congress and yet another amendment to the Communications Act which, I understand, permitted charging the applicant a cost recovery fee for any session during which the applicant desires to attempt any test higher than Novice class, effective as I remember September 1, 1984.

Enter The VE Program As We Know It

Initially the FCC was maintaining the question pools, with the VEC's directed to supply the answers and distractors to the questions the FCC selected for each individual VEC to use on the tests they coordinated. No VEC has ever had exclusive rights to any geographic area, and I doubt that it will ever happen. The FCC soon began permitting the VEC's to select the questions for themselves, and at about this time the League published study guides containing not only all the questions of a particular pool, but the answer and all three "distractors" as would be used in the test room by any VE session coordinated by the ARRL/VEC.

In short order, the other publishers copied the League's work as it was the only material available. The other VEC's had no responsible alternative. I can tell you from a position of experience that it is a whole lot easier to copy answers, and particularly distractors, than it is to try to do a credible job of furnishing them yourself. I, for one, truly appreciate the leadership the League demonstrated on that little item. Not to use the League's answers would have presented the applicant with answers not available to him for preparation, causing the applicants to seek sessions using test

Continued on Page 13

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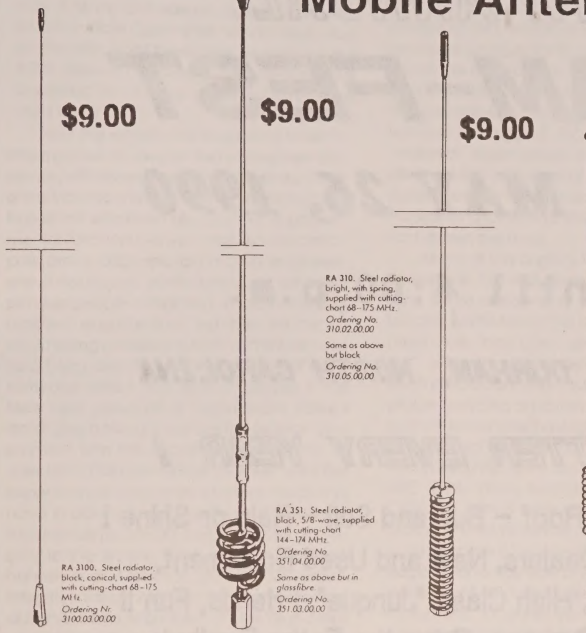

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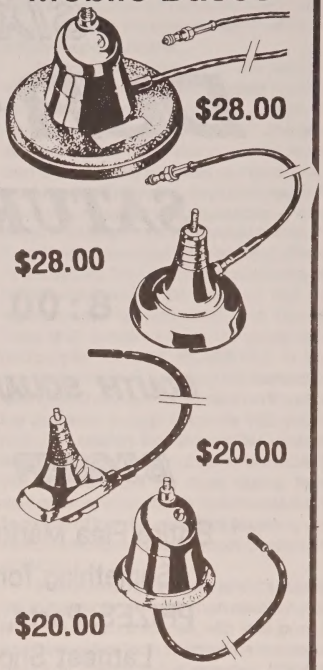

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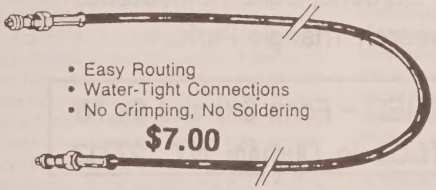

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The VEC Question Pools

Continued from Page 10

material that was available for preparation.

Had the League accepted the position of influence it naturally fell into in this situation, it is my considered opinion that the Question Pool Committee would have died on the vine. Right there. Thus we see how the ARRL answers became a defacto standard, published by all study guide publishers and used by all VEC's.

Now the system was beginning to settle into a groove of unexpected, convenient efficiency, with its real strength being the caliber of the Volunteer Examiner that is volunteering to perform what had always been a governmental function! I've seen high school principals, airline captains, locomotive engineers, anesthesiologists, postmasters and other expensive people delighting in administering amateur examinations, yet they will award you a failing grade as quickly as they will pass you if you aren't quite ready yet. Let's see someone afford that kind of people if the tests were given on a commercial basis; I don't give a hang if you are the federal government with the security of civil service to offer. I don't for one minute think we need the expensive people per se; what we need, and have in abundance, is enthusiastic honesty to continue to provide a high degree of integrity to the system. Plain and simple. Basic honesty is all it takes to give a good exam. Integrity is the principle contribution expected of the VE. Some of our best VE's are blue collar workers and I'll trust those I have in mind to the limit to conduct a proper session, asking for advice at the first cloud of confusion. It is a sobering environment when they ask, too.

I don't think holding an Amateur Extra Class license makes the person a better VE than he would have been as an Advanced Class, but I readily see the FCC's point of view in that the Extra Class will not have access to an exam he may later wish to take himself, thus maybe that item alone can help uphold the integrity of the system. The FCC officials who drafted the program did not do it from a position of ignorance; as a matter of fact, here is an example of their proven capability of performing in the effort expected of them. I have heard the qualifications as a VE offered as a reason to get the Extra Class license in the first place.

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In the meantime, our VEC, the Western Carolina Amateur Radio Society/VEC, Inc. or WCARS/VEC as it has come to be known, had signed an agreement with the FCC on May 11, 1984 as had several other organizations scattered around the country at about the same time. We, like others, were testing before we could charge for it, with our first session being the Atlanta, Georgia hamfest in 1984. Fred Maia W5YI of Dallas, Texas and author of the well-known "W5YI Report," was unquestionably the biggest VEC, as he was the first "national" organization, authorized to operate in all ten call areas of the contiguous 48 states plus the Caribbean, the Pacific, and Alaska, for a total of 13 VEC areas as the FCC had drawn the map.

Many of the original VEC's soon ceased operations. I'm sure there were various reasons. Some deliberately quit to support the League, some found the program to include more work than glory, some suffered "burn out" without replacement personnel, and yes, the FCC cancelled at least one for lack of proper handling of paperwork — at least that is what I remember having heard at the time.

The fact remains that of the 18 that are left WCARS/VEC is the second oldest surviving VEC. Only DeVry Institute (Area 9) out of Chicago, with a letter of agreement dated March 3, 1984 predates us. DeVry later went on to become a "National VEC," but that was accomplished by way of additional letters of agreement, all dated later than their original instrument. Thanks to the 1989 rewrite of the rules, we are all "nationals" now.

In the summer of 1985, the FCC called all VEC's into their first national conference in Gettysburg, Pennsylvania. Most came. Those people were all strangers to each other; all were using procedures vastly different from each other, and I guess at least to some degree, were actually afraid of each other! At least they talked; the FCC showed them through the licensing bureau we all know operates there, and another conference was scheduled for Friday, August 8, 1986 in the FCC's headquarters in Washington, DC. Promptly at 10:00 AM on that day, which turned out to be the effective time of a Report and Order, and without our knowing it was coming, the FCC dropped on the table a legal instrument that divested themselves of the responsibility of maintaining the question pools, and charging the VEC's with this responsibility as well.

The conference reacted by electing the initial Question Pool Committee before the day was over, charging them with maintaining a series of common pools. That committee's members? Gordon Girton W6NLG of Sunnyvale VEC, Sunnyvale, CA; Jim Clary WB9IHH of the ARRL/VEC; and yours truly, Ray Adams N4BAQ of WCARS/VEC, with no designated chairman. Yes, I'm the only "survivor" of the original committee. In all honesty, there wasn't anything at that time that effectively put any pressure on a VEC to use QPC material. The ARRL filed a motion for reconsideration generated from their announced apprehensions that at least some VEC's would compete with each other for applicants by adopting question pools of increasing simplicity to the detriment of amateur radio. I understand they instructed their people to ignore the QPC until their motion for reconsideration and possibly other particles of dust settled. In any event, there really wasn't much we could do in the environment in which we initially found ourselves.

Novice Enhancement in the spring of 1987 pointed out how fragmented the situation was becoming. Adopted January 28, 1987, released February 10, 1987 and effective March 21, 1987, that particular Report and Order literally switched us into absolute panic mode. Thirty-nine days to increase the novice test from 20 to 30 questions — and it would then take two examiners to administer it — still not accredited and reporting directly to Gettysburg. We also had to divide the old Technician/General 50 question test into separate tests for Technician and General Class of 25 questions each. I'm proud of the accomplishment of WCARS/VEC in that scenario in that we furnished the material for testing at Charlotte, NC hamfest on the effective day even though Charlotte VEC coordinated the session. Rich Slover ND4F, a professional programmer, and at that time a WCARS/VEC director paid his dues during those crucial hours and today is Vice President and Secretary of the VEC as well as Secretary and Parliamentarian of the National Conference of VEC's.

The FCC mandated that the VEC's cooperate to maintain one common question pool for each class of license, with that pool to contain not less than 10 times the number of questions on the test in question. What do you know? Legitimacy by decree. Gordon made the announcement in advance by mail that he would resign from the question pool committee effective at noon during the 1987 conference. He attended that conference, and continues to not only attend, but work on behalf of continuing efforts of the conference.

When the conference convened on Friday before and in the same building with the Atlanta, Georgia hamfest, election of a chairman for the Question Pool Committee went several rounds without a majority vote until I cast WCARS/VEC's vote for Jim Clary, WB9IHH, Manager ARRL/VEC. All of my support followed suit, and he was elected our first chairman, with R.C. Smith W6RZA of Greater Los Angeles Amateur Radio Group VEC (GLAARC) and myself completing the committee. Fred Maia W5YI was elected as an "alternate member" without defining the term or its job description! Now we are good at organization, folks — see what we did! The committee met the following morning and decided on a schedule by which we would change the question pools, putting a new Element 4B (Extra Class written test) in use the following winter, working on a three year life cycle for each element as instructed by the full conference.

The 1988 conference was on Friday before and on the scene of the Dallas, Texas hamfest, with Fred acting as the gracious host he is. It was only there that we got around to naming a Vice-Chairman of the Question

Continued on Page 16

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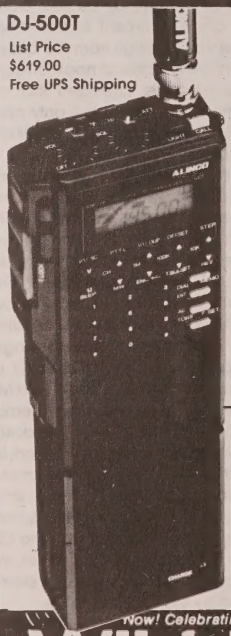

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- Scan Both Bands at Once (Mem/VFO or either or both!)
- 20 Memories (10 on each band)
- Call Channels — one for each band (Immediate Access)
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List Price
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- 16-key DTMF TT Microphone with up/down buttons
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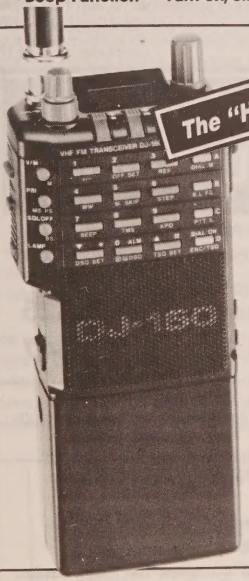

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Alinco DJ-160T 2-Meter Handheld

The "Newest" of the Best! The New DJ-160T joins the other "Magnificent" radios from Alinco. It is "Tiny" yet has all the functions and features of the "big" high priced, full-featured handhelds.

DJ-460T 440 Mhz. Full Featured H/T $269.00

DJ-160T
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Features of DJ-160T and DJ-460T

- 20 Memory channels and 1 call channel
- 3-Watts out on Standard 700 Mah Battery
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- Keyboard entry — or by Up/Down keys
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- Subtone encode included
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- Automatic Power Off Function
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- "Dial Function" (change frequency or memory)

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The VEC Question Pools

Continued from Page 13

Pool Committee, an office that was again not described and to which I was elected. The committee membership did not change, with the conference concurring that the committee was doing a "credible" job, as I remember the description. In any event, we came home, solicited input, developed some material ourselves and put new Novice and Technician class pools in public domain February 6, 1989 with instructions that they must be used by all examiners November 1, 1989.

While these pools were in public domain and before their implementation, two things drastically altered our environment. As I remember, in early February, a letter to the FCC at Gettysburg with copies to all VEC's signed by David Summer K1ZZ, Executive V.P. of ARRL advised that Jim Clary's resignation from employment at ARRL had been accepted. There was the phone call from Tom Ingram K4OOV, of Central Alabama VEC (CAVEC) and Chairman of the National Conference of VEC's telling me that in his opinion I had just inherited the Chairmanship of the Question Pool Committee. The conference had decided by acclamation at the 1988 conference that membership on the QPC was held by individuals, not the VEC's! I looked around, recognized the validity of certain feedback we were getting, asked ARRL for the mailing list as had been used by the QPC, and issued an addendum to the releases. During this same "shuffling," Fred and "Smitty" as we call him, traded places, as Smitty was a senior executive in a high-tech industry, travels extensively, and could perform more effectively as the alternate member of the QPC than he could as a regular member. He has since retired — do I see a possible candidate for my replacement as chairman of the QPC? Tom exercised executive privilege and appointed Fred Vice-Chairman with Bart Jahnke KB9NM, Jim Clary's replacement as manager of the ARRL/VEC to complete the committee pending confirmation by conference vote when it assembled. After all, the world cannot be allowed to stop just because one man quit!

The 1989 conference was back in Gettysburg on July 8. I considered it a significant personal compliment that the conference not only confirmed Tom's appointments by unanimous vote but followed that action by minutes reading "that members of the QPC may represent VEC's but are individuals, passed 7 to 1." For that trust and confidence, as inadequate as it sounds, and is, to the amateur population of the nation, all I can say in addition to "Thank you" is that I do not take such trust lightly and will make every effort to ensure the conference never has legitimate reason to regret their actions. Mistakes we all know we are going to make. Hopefully my mistakes in this endeavor will not sink the ship outright. In any event, regardless of their magnitude, rest assured they will be honest mistakes. Should you detect a mistake in the making, please bring it to our attention in the manner that, by your judgement, will minimize the damage to amateur radio. Mother nature causes me to be the first CPA in the yellow pages of Knoxville, Tennessee and the office and home numbers are both in the white pages, but in all honesty, I prefer most communication in written form. It's not that I'm a formal person; it's just that a piece of paper won't forget what is written on it and I plead guilty to having a memory that is less than perfect.

The committee is functioning smoothly, with much of the communication being by way of electronic mail, using the MCI electronic mailbox. As I understand it, it operates exactly like packet radio except by a telephone connection rather than radio, with no limit to the size of a packet, and of course without the prohibition of business use. In the process of releasing the "discretion lists" of elements 2 and 3A recently, all committee members had access to the finished product before any hard copy went in the mail, even though we're physically separated by hundreds of miles. That's pretty neat. And our rough drafts were pretty free in floating around between us, too. A pleasant side effect to the cost-conscious accountant that I remain is that it costs less than the photocopy and postage expense it replaces, not to mention the time saved and speed accomplished.

The opening sentence of 97.523, as effective September 1, 1989, says "All VEC's must cooperate in maintaining one question pool for each written examination element." There can be little doubt but that the Question Pool Committee is the collective response of the VEC's of the nation, in session and voting, to that charge. The assignment of the QPC is simply the mechanics by which it will be done.

Now that I've told you where we, the Question Pool Committee, come from, the real purpose of this article comes out. I hope to have enlightened the amateur population of the nation as to our method of operation to the point that they will just as willingly help write the question pools by way of submission of materials for use in those pools as they have volunteered to administer the tests! Although we have a form for such submission, its use will not be made mandatory. Even though the form's use will not be required, the committee has published "submission standards" which must be observed in order to lend uniformity to the question pools and to maximize public participation in the process of developing a reasonable testing base for the Amateur Service. These standards are on CompuServe at QPCSTD.988, or can be furnished for an SASE.

At Atlanta in 1987 the conference voted to instruct the QPC to proceed at their own schedule as to the particulars of when and which element, but to revise and update each question pool each three years. At a QPC meeting the following day, we decided to change Element 4B (Extra Class) first, solicited input that fall, and put a revised question pool in public domain March 1, 1988 with instructions that it be implemented in the test room November 1, 1988. That happened. While that one was in public domain, we began soliciting input for both Elements 2 (Novice Class) and 3A (Technician Class) simultaneously, placing revised question pools for those elements in public domain February 6, 1989 with instructions that they be implemented in the test room November 1, 1989. We're sure that will happen. What we aren't sure about is the future beyond that horizon.

The FCC Rewrote The Book

By formal commission action May 31, 1989, released June 9, 1989 and effective September 1, 1989, the FCC literally rewrote Part 97 by way of PR Docket No. 88-139 entitled "In the matter of Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Services."

The 1989 conference of VEC's, by a vote of 10 to 1 directed its question pool committee to ". . .address the part 97 rewrite first, and not the current elements,. . . ." and followed that with a majority action saying, "We as a conference enable the Question Pool Committee through next year to use its own judgement to implement the Part 97 rewrite and any other items that need change without conference guidance for this one year only,. . ." Meeting until the wee hours that night, the QPC drafted a news release, dated July 7, 1989 as to our intentions. We are pleased to report that we are ahead of the schedule to which we have committed, releasing the "Discretion Lists" targeting the questions, answers and distractors that will need revision in elements 2 and 3A because of the Part 97 rewrite on August 23 as compared to our commitment of September 18, with the supplements revising those elements placed public

Concludes on Page 17

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domain October 11, for implementation in the exam room July 1, 1990. "Discretion Lists" for Elements 3B, 4A, and 4B were released December 11, and their supplements February 26 for implementation in the exam room November 1, 1990.

We signalled not only the affected question but the area of change (Question, Answer, or Distractor) and the severity of change as well. In the process of compiling the discretion lists we developed our own individual notes as to the needed changes, so each of us already had a rough draft of the promised supplement, except for the few questions that will simply have to be replaced. I believe I could have issued an acceptable version of a supplement at the time of the first draft ofthis article (9-8-89) but waited a few more days to see what, if anything, the mail (electronic or physical) produced.

The biggest weakness of the VEC program, from my point of view, is either the lack of input to the QPC by typical ham or the total lack of any provision for financing the activities of the committee, per se. You are correct in that the financial bit is not a terribly big weakness, as the expenses are not that significant, but they are quite real just the same; telephone, postage, photocopy, etc., can add up when concentrated in sizeable quantities. Part 97.523 says each question must be prepared by a VE (that does not have to be accredited) holding the required FCC-issued operator license. See 97.507(a). When we get over to 97.507(a), we find that the real meat of the issue is that the VE must have passed, and hold the actual piece of paper that is the license resulting from having passed the next higher class of license (if there is one) above the license level for which he is submitting material. This causes the requirements to look like this:

To submit for	Sumitter must hold
Novice (element 2)	Technician or higher
Technician (element 3A)	General or higher
General (element 3B)	Advanced or Extra
Advanced (element 4A)	Extra
Extra (element 4B)	Extra

As to the timing of any future changes, that is anyone's guess. The National Conference of VEC's, while not adversative, are certainly not "yes men" either, and the outcome of any decision is not always predictable. When the history of QPC production is considered, in that we first changed element 4B (Extra) as being in the worst shape and needing straightening out first, then moved in squential order to elements 2 (Novice) and 3A (Technician) simultaneously, it would look logical to me that element 3A (General) would be the next element revised, possibly with 4A (Advanced) being extended even simultaneous treatment. We should know June 16, 1990, the date of the next conference meeting.

Come Help Us

What particular subject should those questions address? The broad outline is to be found at 97.5XX which says:

"97.501 Qualifying for an amateur operator license.

An applicant must successfully pass an examination for the issuance of a new amateur operator license and for each change in operator class. Each applicant for the class of operator license specified below must pass, or otherwise receive examination credit for, the following examination elements:

(a) Amateur Extra Class operator: Elements 1(C), 2, 3(A), 3(B), 4(A), and 4(B);

(b) Advanced Class operator: Elements 1(B) or 1(C), 2, 3(A), 3(B), and 4(A);

(c) General Class operator: Elements 1(B) or 1(C), 2, 3(A), and 3(B);

(d) Technician Class operator: Elements 1(A) or 1(B) or 1(C), 2, and 3(A);

(e) Novice Class operator: Elements 1(A) or 1(B) or 1(C), and 2.

97.503 Element standards

(a) A telegraphy examination must be sufficient to prove that the examinee has the ability to send correctly by hand and to receive correctly by ear texts in the international Morse code at not less than the prescribed speed, using all the letters of the alphabet, numerals 0-9, period, comma, question mark, and prosigns ar, bt and sk.

(1) Element 1(A): 5 words per minute
(2) Element 1(B): 13 words per minute
(3) Element 1(C): 20 words per minute

(b) A written examination must be such as to prove that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service licensee. Each written examination must be comprised of a set of questions as follows:

(1) Element 2: 30 questions concerning the privileges of a Novice Class operator license. The minimum passing score is 22 questions answered correctly.

(2) Element 3(A): 25 questions concerning the additional privileges of a Technician Class operator license. The minimum passing score is 19 questions answered correctly.

(3) Element 3(B): 25 questions concerning the additional privileges of a General Class operator license. The minimum passing score is 19 questions answered correctly.

(4) Element 4(A): 50 questions concerning the additional privileges of an Advanced Class operator license. The minimum passing score is 37 questions answered correctly.

(5) Element 4(B): 40 questions concerning the additional privileges of an Amateur Extra Class operator license. The minimum passing score is 30 questions answered correctly.

(c) The topics and number of questions required in each question set are listed below for the appropriate examination element:

With the supplements available on CompuServe's Hamnet section, Regulatory Affairs Division, indexed as

QPSPMT.EL2 for Question Pool Supplement Element 2

QPSPMT.E3A for Question Pool Supplement Element 3A

QPSPMT.E3B for Question Pool Supplement Element 3B

QPSPMT.E4A for Question Pool Supplement Element 4A

QPSPMT.E4B for Question Pool Supplement Element 4B

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Topics	Element: 2	3(A)	3(B)	4(A)	4(B)
(1) FCC rules for the amateur radio services	10	5	4	6	8
(2) Amateur station operating procedures	2	3	3	1	4
(3) Radio wave propagation characteristics of amateur service frequency bands	1	3	3	2	2
(4) Amateur Radio Practices	4	4	5	4	4
(5) Electrical principles as applied to amateur station equipment	4	2	2	10	6
(6) Amateur station equipment circuit components	2	2	1	6	4
(7) Practical circuits employed in amateur station equipment	2	1	1	10	4
(8) Signals and emissions transmitted by amateur stations	2	2	2	6	4
(9) Amateur stations antennas and feed lines	3	3	4	5	4
TOTAL	30	25	25	50	40

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Docket 90-55 — Codeless License Proposal Has Mixed Reactions!

The expected "codeless' license proposal by the FCC was presented to the ham community in February. As expected, Amateurs are lining up, either "for" or "against" no code.

The FCC seemed to know what might soften the blow to some of the no code dissenters. In the Docket proposal, they suggest a strong 60 question written test for the new code-free "Communicator" class entry license into Amateur Radio. The Commission also suggests the Communicator exams be handled through the VEC system. These two things should quell any complaint anyone has about cheating and qualifying.

In its document, the FCC suggests establishing a new Communicator class Amateur entry license. The Communicator would upgrade to General, Advance and Extra, eliminating the Novice and Technician class license. The FCC quickly pointed out that Novices and Technicians may upgrade, or they may stay "grandfathered" as Novices and Technicians, although there would be no new Novices and Technicians in the future.

The new Communicator operating privileges are all authorized emission types above 222 Mhz, power standard would be 200 W PEP, and callsigns from the Group "D" Block (2X3).

The comment period for PR Docket 90-55 extends until August 6, with reply comments due on September 7.

SPARK Loses

— by P. Kenneth Pierpoint, KF40W

Upshur O. (Sam) Joyner, WB4JPA, became a Silent Key on January 1, 1990. He had been a member of the Southern Peninsula Amateur Radio Klub, SPARK, from its beginning and was the 'Father' of the 13/73 2-meter club repeater. In the past few months Sam had completed and installed a new 440 repeater and controller at the club repeater site at his own expense. His parents, Kitty and Uppy (W4BGG) Joyner have graciously donated the entire 440 repeater and controller system to SPARK.

In appreciation of this generosity, the Club has attached a suitable memorial Name Plate to the 440 machine, and has presented his parents with a beautiful 8 x 10 black-on-gold Plaque.

IN MEMORY OF

SAM JOYNER WB4JPA

Amateur Radio Operator par excellance

IN GRATEFUL ACKNOWLEDGEMENT OF HIS

Example to the "ham" community
Dedication to communications quality
Skill as a radio technician
Perseverance in problem solving
Faithfulness in monitoring the bands
Farsightedness as the "73" manager
Responsiveness to others needs
Loyalty to his radio club and friends

SAM, OUR FRIEND WILL BE MUCH MISSED

—SPARK, Southern Peninsula Amateur Radio Klub
February 6, 1990

SERA Computer On Line For Directors

The goal of getting the SERA Computer and database on line and available to all SERA Directors is finally upon us.

David Ward, KA4LVO, our main computer operator has the system set up and has tailored special programs for several of the Directors to enable them to access the very strongly protected system.

"Our ultimate goal has been, and continues to be that of giving each SERA Director an opportunity to call into the main SERA computer at any time, look at the index of any State, and make any changes to his State," David said.

He said the extensive program used on the SERA database had to be specially tailored so the Directors could utilize only the repeater portion of the database without taking up so much memory of the other stuff. David said the break away software has been written, and we tailor each piece to each director, with his own access codes and passwords for immediate coded entry via modem.

Group "C" Calls Running Out in 4th Call District

The Group "C" callsigns being issued by the FCC for Technician/Generals are running out. It is estimated the 1X3 "N" callsigns will run out by midsummer. As of March they were down to the N4Ys. Approximately 200 "N" calls are issued a month. When they run out, Tech/General upgrades will get or retain Group "D" callsigns, the 2X3 format.

AEA Announces New Dummy Load

AEA is pleased to announce a new dry dummy load, the DL-1500. The DL-1500 simulates a perfect 50 ohm antenna up to 650 Mhz so you can test your transmitter without radiating a signal in the air.

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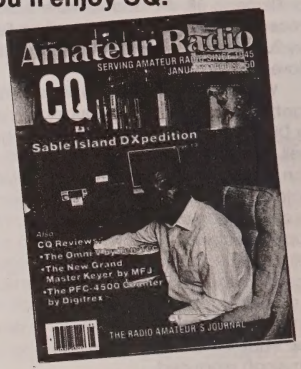

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VE/VEC EXAM SCHEDULE

TENNESSEE

Blount County, Maryville WCARS-VEC

Second Monday-Each even month, Jun.11, Aug.13, Oct.8 and Dec.10. 7:00 P.M. at St. Andrews Church Hall, W. Broadway, Maryville. Walk-ins normally accepted. Contact: Carrol Peabody, W4PCA (615) 982-5839.

Carter County WCARS-VEC

Walk-ins accepted if registered by 8:45 a.m. Exams some Saturdays at 9:00 a.m. Contact Joe Hopkins. K4BKI. (615) 543-4022 for schedules.

Chattanooga WCARS-VEC

Exams held at Red Cross Building. Pre-reg required 2 days in advance. For scheduling information, contact Bruce Adams, KA5DLV (615) 899-9687.

Cleveland WCARS-VEC

Quarterly Exams at STAR Club Building. Sat. and Sun Afternoons at 3:00 p.m. Jun.9 & 10, Sep.8 & 9, and Dec.8 & 9. Walk-ins normally accepted. Contact: Russell E. Lawson, WB4LCB, 802 SE 20th St. Cleveland, Tn. 37311. (615) 476-8476. Alternate contact, Herschel N. Hamby N4ADO, 1795 Young Rd. SE, Cleveland, Tn. 37311. (615) 472-1752.

Fentress County WCARS-VEC

Walk-in exams scheduled. For information contact: Mike Ledbetter, AB4BX, (615) 879-8626 or alt: Steve Qualls, KJ4HT, (615) 879-7517.

Greeneville WCARS-VEC

Exams on 4th Saturday of each odd-numbered month at Cumberland Presbyterian Church. May 26, Jul.28, Sep.22 and Nov.24. Walk-ins normally accepted. Contact Tom Austin, K4OTM (615) 639-3465 or alt: Jack Creed, K4EPC, (615) 638-7056.

Henry County WCARS-VEC

Exams with walk-ins held at Henry County High School, Paris. Contact Mackie Gallimore AA4YF, (901) 247-5489 for future schedules. Alt. Les Merrell, KQ4F, (901) 642-5966.

Jasper WCARS-VEC

Walk-in exams held Sunday afternoons at Jasper Public Library. For schedules, contact: Charles Wooten, KD4XX, (615) 942-5116.

Knoxville WCARS-VEC

Third Saturday of each month normally. Upgrades only. Novice testing on request from NY4A, N4BAQ, ND4F, WA4GZE, N4JL, W4MHA, KM4SX, WA4TKN and others. Pellissippi State Tech. Room B-129. (except Hamfest dates) Pre-registration required. Contact: Ray Adams, N4BAQ, 4325 Felty Dr., Knoxville, Tn. 37918. (615) 688-7771. Alt. Rich Slover, ND4F, 2700 Waverly St. #4, Knoxville, Tn. 37921, (615) 525-5923. Sked: Apr.14 Oak Ridge Hamfest, Jun.2 Knoxville Hamfest, Jun.16, Jul.21, Aug.18, Sep.15, Oct.20, Nov.17, and Dec.15.

Loudon Cty, Loudon WCARS-VEC

Fourth Saturday of each even month, at Third National Bank on U.S. 321 E. (321 is Exit 81 on I-75, then East to Bank) Walk-ins normally accepted. Contact: Bob Gray, KE4SK (615) 458-6115.

McMinn County WCARS-VEC

Exams on 2nd Monday evening at 8:00 p.m. of each odd numbered Month, at Athens Municipal Building Council Chambers. Walk-ins accepted. Sked: May 14, Jul.9, Sep.10, and Nov.12. Contact Ben C. Dickson, W4NEG, (615) 745-2198. Alt. Evan Ray, WA4PNI. (615) 263-9300.

Metropolitan Memphis Area ARRL-VEs

Exams on First Saturday in February, April, June, August, December at 9:00 a.m. at State Technical Institute in Memphis. Exams October 13 at "Memfest '90" at Mid-South Fairgrounds. Pre-registration for all sessions within 2 days of exams. Contact Harry Simpson W4MI at 1830 Macaulay Ave., Memphis, Tn. 38127. Call (901) 357-8148.

Morgan County WCARS-VEC

Second Saturday of each odd month at Joyner Volunteer Fire Dept., Coalfield. Sked: May 12, Jul.14, Sep.8, and Nov.10. Walk-ins normally accepted. Contact: Paul Seavers, AA4UP (615) 435-6052.

Roan County WCARS-VEC

Second Saturday of each even month at Pond Grove School, Rockwood. Sked: Jun.9, Aug.11, Oct. 13 and Dec.8. Walk-ins normally accepted. Contact: Richard Spillee, AA4KS, (615) 354-4281. Alt. Bill Smelcer, KA4AAD, (615) 882-9070.

WEST VIRGINIA

Bluefield W5YI-VEC

Exams (Novice thru Extra) second Saturday each Quarter, Feb., May., Aug., and Nov. 9:00 a.m. Bluefield State College. Walk-ins are preferred. Contact: Don Williams, WA4K, (Bluefield VE Team) (703) 326-2411 or (703) 326-3338.

Charleston, W.Va. W5YI-VEC

The Kanawha Valley group gives Novice thru Extra class exams at 9:00 a.m. 3rd Saturday of each month, at Holy Trinity Catholic Church in Nitro. Walk-ins are accepted. Talk-in on 40-00 St. Albans repeater.

KENTUCKY

Hazard WCARS-VEC

Examinations usually held on some Tuesdays at 7:00 p.m. at Ray G. Eversole School. Walk-ins normally accepted. For exact dates and additional information, contact John Farler, K4AVX, (606) 436-5354.

Middlesboro WCARS-VEC

First Saturday at 10:00 a.m. of each even numbered month at Middlesboro Library. Jun.2, Aug.4, Oct.6 and Dec.1. Walk-ins normally accepted. Contact Wade Bevins, WA4OBL (606) 337-8165, or alternate James Dyke, KZ8A, (615) 869-4453.

SOUTH CAROLINA

Lancaster W5YI-VEC

Novice thru Extra. Pre-Regis, or Walkins. 9:30 a.m. USC, Main Bldg. Talkin 10-70. Contact Grady Robinson, AK4N, 902 Forest Dr.. Lancaster, SC 29720. (803) 283-8298. Exam Dates: June 16, Aug. 19, Dec. 15.

VIRGINIA

Danville W5YI-VEC

Exams held last Tuesday of each month January through November at Danville Community College, Hill Building. Contact Jim Bond, AB4FZ, (804) 799-2422 for further information.

Roanoke WCARS-VEC

Upgrade Exams Only. Novice Testing on Request from AF2D or W4OLD. (Call for info) Pre-registration is required for following date: May 13, cutoff May 6, 8:00 a.m.. Walk-in exams are held at Hollins College on Sep.22 and Dec.1 at 9:00 a.m. For info, contact Fred L. Horton, KZ4Y, 4024 Oakland Blvd., Roanoke, Va. 24012. (703) 366-6266.

Norfolk, Va. Beach, Hamp Rds, Portsmouth, Chesapeake, Williamsburg

All exams: Walk-ins are ok, but contact person would like to know in advance you are coming. Bring original license and photo copy and any license upgrade certificates. See individual exams for Contact person.

ARRL EXAMS - $4.95 Check payable to ARRL/VEC W5YI Exams - $4.95 Check to Bill Verebely/VEC for Chesapeake DX Assn Exams, Check to HRRA/VEC for Hampton Roads RA exams.

Southeastern Virginia Schedule HAMP.RDS EXAMS W5YI/VEC-May 19, Aug.11. Bill Runyon, N4BDH, 487-8611. CHESAPKE DX ASSN EXAMS W5YI/VEC-Jul.14, Bill Verebely, KC4YX, 424-4764. PORTSMOUTH ARC ARRL/VEC - May 5, Nov.3, Art Thiemens, AA4AT 484-2857. VIRGINIA BEACH ARC ARRL/VEC-Jun.2,Dec.1, Tom Weikel, KA4UNC 340-7697. VA. BEACH-ARRL ROA. CONVENTION Sep.16. Ed Brummer, W4RTZ 898-8031.

NORTH CAROLINA

Asheville WCARS-VEC

Exams on Saturday: Jul.28 (Hamfest), and Oct.27. at 9:00 a.m. at Health and Social Services Bldg. Walk-ins normally accepted, except Hamfest, which must register one week in advance. Contact Garland Lance, NC4N, 854 Sand Hill Rd., Asheville, NC 28806 (704) 667-3758.

Asheville WCARS-VEC

Second Saturdays: Mar.10, Jun.9, Sep.8 and Dec. 8. Held at 9;00 a.m. at Leicester Vol. Fire Dept., 9.3 mi. N. of Patton Ave. on Hwy 63. Walk-ins normally accepted. Contact Larry York, WB4PLA, Rt. 4, Box 420 Martin Br. Rd., Leicester, N.C. 28748. (704) 683-1400.

Kernersville TEARC-VEC

First Saturday of each month, contact Bob Gates, KJ4IC, (919) 996-5196. Third Saturday of each month, contact Ray Anderson, AA4LT, (919) 882-3869. Exams for both sessions at 9:30 a.m. at Kernersville Public Library. Fee $4.75. Walk-ins allowed.

Other TEARC-VEC Examiners LEXINGTON, NC - Contact: Rae Everhart, K4SWN, (704) 249-8734. WILMINGTON, NC - Contact: Don Conaway, AF4J, (919) 791-9460. MORE TEARC EXAMS - Contact: Jim Williamson, NQ4T, (919) 841-7576.

Raleigh ARS and Durham FMA VEs

Conduct examinations alternating monthly between Durham and Raleigh. Pre-registration generally requested, but walk-ins are accepted until 30 minutes prior to exam time. Contact: AA4MY or KY4Y for further information and schedules. DFMA-May 12, and RARS-Jun.6. (Editor's note: DFMA repeater in Durham is 825-225. RARS machine in Raleigh is 04-64 to assist in getting information.)

Yadkinville ARRL-VEC

Walkin exams, 2nd Saturday of every month, 9:00 a.m. at Yadkinville Elementary School. May 12, Jun 9, Jul 14, Aug 11, Sep 8, Oct.13, Nov.10 and Dec.8. For info, contact Fred Pepper, N4UAN, Rt. 6, Box 574, Yadkinville, Nc 27055. (919) 679-8954.

Salisbury W5YI-VEC

Walkin exams, 2nd Sunday of each month, starting June 10th at Western Steer Steak House, 601 By-Pass. 2:30 p.m. Novice thru Extra. Info, contact Isabelle Ledford, N4VCK, P.O. Box 826, Cooleemee, N.C. (704) 284-2414.

GEORGIA

Augusta ARRL-VEC

Exams conducted at Fort Gordon, Bldg. 31424 at 9:00 a.m. 1990 schedule: May 12, Aug.11, Oct.13 and Nov. 10. Contact: Ace Norton, NA4I (404) 798-5060.

Augusta WCARS-VEC

Exams on 2nd Saturday of each Odd numbered month at Sue Reynolds Community Center. Code tests at 10 a.m. Written elements at 11 a.m. Walk-ins normally accepted. Schedule: May 12, Jul.16, Sep.8, and Nov.10. Contact Jim Abercrombie, N4JA, 2360 Travis Pines Rd., Augusta, Ga. 30906. (404) 790-7802..

Metro Atlanta Area Examinations

Lawrenceville W5YI-VEC Exams scheduled 1st Sunday each month at 2:00 p.m. at Jackson EMC, 461 Swanson Rd., Lawrenceville. Fee $4.75. Walk-ins accepted. Contact Duane Reynolds, WB2YAD, 962-9582.

Stone Mountain CA-VEC Schedule is 2nd Saturday of each month, at 8:30 a.m. at Stone Mt. Methodist Church, 5312 W. Mt. St. Walk-ins accepted. Contact Hal Martin, KI4RD, 469-6430. Fee $4.00.

Southern Tech CA-VEC Exams on 3rd Saturday each month. Walk-ins accepted. 9:00 a.m., at Southern Tech, Room 209, Classroom Bldg.. (Exit 112 from I-75) Contact Hal Martin, KI4RD, 469-6430. $4.00 fee.

DeKalb County CA-VEC Walk-in exams held 4th Thursday of the month at 7:00 p.m. at DeKalb Co. E.Precinct, Lithonia. Contact Harvey Pearson, WB4PHF, 972-5061. $4.00.

South Atlanta ARRL-VEC Walk-ins accepted for exams held on 4th Sunday each month at 2:30 p.m. at Church of the Atonement on Highpoint Rd. Contact Neil Foster, KC4MJ, 449-3340. Fee $4.75.

Dalton WCARS-VEC

Exams sked: Jun.30, Aug.25, Oct.27, and Dec.22. Unity Methodist Church at 4:00 p.m. Pre-reg. required day before exam. Contact Bert L. Coker, N4BZJ, 1320 Michael Dr., Tunnelhill, Ga. 30755. (404) 673-2214. Alt. Contact, Harold W. Jones, N4OTC, P.O. Box 211, Rocky Face, Ga. 30740. (404) 278-7077.

Join The Journal! Support SERA and Get The Journal At No Extra Charge!

Make a copy of this application and pass it to a friend. Encourage him to help support the coordination council that for 17 years has worked to keep your repeater in the clear. Your membership guarantees a continuation of this work. Associate Members (repeater users) will receive the REPEATER JOURNAL quarterly. If you are a present Associate Member, you may use this application to renew, change address, or change callsign.

Deadlines for membership are the 15th of the month prior to Publication, to receive the next upcoming Journal. (Jan. 15, Apr. 15, Jul. 15 and Oct. 15). Applications received after deadline will receive the next Journal 3 months away.

RJ 05-90

The Repeater Journal is Published Quarterly - Feb., May, Aug., Nov.

Yes! I Want to Support SERA - Sign Me UP for the Journal!

SERA ASSOCIATE MEMBERSHIP APPLICATION

Name _____ **Call Sign** _____

Address _____ Date _____

City _____ **State** _____ **Zip** _____

Phone (**)** _____ **ARRL Member [ ] Yes [ ] No**

Enclosed is $ _____ **for** _____ **Years(s) Membership**

(Check Appropriate Box Below)

Mail Application & Fee To:

SERA MEMBERSHIP
P.O. BOX 215
TOBACCOVILLE, N.C. 27050

NEW MBR _____ **RENEWING** _____ **HOT-P MBR** _____

$6.00/Year (Maximum 2 Years) (Journal mailed 3rd Class)

$10.50/Year (Maximum 1 Year) (Journal mailed 1st Class)

You Will Receive the Next Journal

REPEATER JOURNAL ADVERTISING RATES

Effective 1 January 1990

The Repeater Journal is a 3 column magazine with overall page dimension of 8½x11 inches. Our page size enables a wide variety of ad sizes from a full page, to a one column inch size ad.

Column Widths are 1 col: 2¼-in., 1½ col: 3½-in., 2 col: 4⅝-in., 3 col: 7⅛-in. Ad widths will be based only with the specified column widths.

ADVERTISING DEADLINES

New ads, or ad size changes must be sent to the Advertising Manager no later than the 20th of the 2nd month prior to month of publication. (Feb. issue - Dec. 20, May issue - Mar. 20, August issue -June 20 and November issue - Sep. 20)

COPY DEADLINES: New advertising copy or ad changes for existing ads must be in the hands of our Advertising Manager no later than the 1st of the Month prior to Month of Publication. We cannot guarantee insertion of ads after deadline, although every effort will be made to accommodate.

NOTE: Ads published in the Repeater Journal will be repeated the next issue unless notified by the advertiser. If you wish to continue running your present ad, no notification is necessary.

BILLING: Advertisers are billed quarterly after the Repeater Journal is published. All invoices are due upon receipt. Advertisers with unpaid bills will be unable to run further advertising until their account is settled.

CONTRACT ADVERTISING: Contract advertising is billed quarterly after each publication. There is no discount for multiple issue advertising.

VOLUME DISCOUNTS: Advertisers who wish to place more than one ad in each issue of the Repeater Journal may receive additional discounts for each additional ad of the same size run in the same publication issue. A second ad of the same size will receive a 10% Discount, a third ad the same size will receive a 15% Discount. For instance, an advertiser running three full pages will pay full single page price for first page, the second page will receive 10% discount off full single page price, and the 3rd full page receives 15% off the full single page price. The same discounts apply to other ad sizes. They must be of the same size as the first ad to receive the discount rates.

Repeater Journal advertising rates apply to exact size, camera ready copy. We can provide typesetting and/or reduce art for your ad at our cost. Composition and typesetting for a full page ad is approximately $25 to $35, depending on amount of copy. Reduction or enlargement of artwork is $5.50 each piece. COLOR: One additional spot color, on available color pages is available for an additional $35.00 charge per ad, except instances where facing color pages occur in the front and back of the book, only one color charge is made for two pages of advertising. FULL COLOR is available on the Inside Front and Inside Back covers. 100-144 line separation negatives, with color key should be supplied by the advertiser. Separations should be negatives, right reading, emulsion down. No extra charge for full bleed. Due to the Repeater Journal page width being approximately ¼-inch wider than national magazines, if separations are not wide enough for full bleed left to right, bleed will be to outside edge of page.

We can assist in layouts of your ad. Artwork from national magazines can be used at your request if an unfolded clean copy is included with ad dummy.

It is the advertiser's responsibility to cancel advertising for upcoming issues when remitting payment, or prior to deadline for the next issue, otherwise, the ad will be repeated until further notice.

The Repeater Journal cannot be responsible for errors in advertising, due to typesetting or proofing mistakes, although every effort is made for accurate depiction of your ad. We cannot be held accountable for equipment or accessories that do not live up to the advertised claim. We cannot be responsible nor guarantee insertion of any advertising received after normal deadlines.

BUSINESS CARDS, CLASSIFIED ADS AND HAMFEST advertising must be sent accompanied by full payment for insertion. If additional work is required to ad, advertiser will be billed for additional cost.

HAMFEST FLYERS for hamfest ads are suitable although they must be placed on the camera for size adjustment ($5.50 extra charge). Flyers should be clean, preferably printed in black ink, and not wrinkled or folded for best reproduction.

REPEATER JOURNAL ADVERTISING SIZES AND RATES

Ins. Frt. or Ins. Back Covers	8½"x11"	$335.00
Full Page	7⅛"x9⅞"	100.00
Full page Bleed (any sides)	8½"x11"	125.00
2/3 Page (Vertical)	4⅝"x9⅞"	75.00
1/2 Page (Horizontal)	7⅛"x4¾"	55.00
1/2 Page (Vertical)	3½"x9⅞"	55.00
1/2 Page (2-Col Vertical)	4⅝"x7⅛"	55.00
1/3 Page (Vertical only)	2¼"x9⅞"	40.00
1/4 Page (Vertical only)	3½"x4¾"	32.00
1/6 Page (Vertical)	2¼"x4¾"	22.00
1/6 Page (horizontal)	4¾"x2¼"	22.00
1/12 Page (Vertical only)	2¼"x2¼"	14.00
Business Cards-Repeater/ Club Cards On Directory Page	(4-issue Contract) In Advance	18.00
Classified Ads (30 words max)	In Advance	3.00
Color (1 add'l color plus black)	Any size ad	35.00

Sizes listed above are width by length in that order. Ads which run lengths between sizes listed above will be billed according to column inch rate at midpoint. Prices above are for exact size, camera-ready positive photoprint, or pasteup. Full color ads for covers are negative, right reading emulsion down. Camera work, typesetting will be charged at our cost. There is no charge for layout design or pasteup.

WEST VIRGINIA NOTES

By Ted Wolfe, WD4KHL

Just after deadline for the February Journal, I received a note from J.R. Chiado, WJ8G, Clarksburg. J.R. is Net Manager for the West Virginia Weather and Travelers Net, a member of the Skywarn System. It meets Monday evenings at 8:00 p.m. local time.

The net operates in the coverage area of the HAMTALK repeater system ranging through portions of West Virginia, Virginia, Maryland, Ohio and Pennsylvania. The repeater (output) frequencies are: 146.685, Clarksburg; 147.285, Spruce Knob; 443.100, Buckhannon; 145.290, Glenville; and 444.400 in Luray, Virginia.

• • • •

John, KB8GLH, finally came up with the call and frequency for me that is on the new Parkersburg, WV, repeater. It is WF8U on 146.145/-146.745. I have heard talk of linking it to one of the area repeaters but I have no details at this time. Since I am no longer in the coordination of repeaters I often have to call upon you readers to help me with a call or frequency. Keep your news coming.

• • • •

Jeff, KB8AKE, Flint, Mi., was monitored traveling in the area on 3/23, speaking with a number of Kanawha Valley hams.

• • • •

Terry Sanner, ex-WD4ALW, got a new call — WV8V — when he upgraded late last year.

• • • •

Rick, KB8JAU/KT from Kanawha City, a Kanawha County paramedic, has been on 2-meters recently. He is stationed at the Rand area station on old US route 60 just west of the DuPont plant in Belle.

Another ambulance service ham with the county is Jim, KA8PYC.

• • • •

Frank, K8OHZ, is a Putnam County Deputy Sheriff. Jim, WB8YST, at Kanawha City, is a Kanawha County deputy.

• • • •

The new call on the West Virginia Amateur Radio, Inc., (WVARI) 147.87/147.270 Charleston/Huntington repeater is that of Betty Palmer, WC8S. The call on the SCOTT:N8BHP-1 WVARI packet node has also been changed. It is now SCOTT:N8GZA-1. The changes were made necessary by the move from our area of Mike, N8BHP. He has transferred to Tulsa, Ok. Ken, N8GZA, Sissonville, is Secretary of the WVARI club.

• • • •

During March the Charleston **Gazette** had a feature writeup with photo on R.H. Peters, a black Chevrolet dealer in Hurricane, Putnam County. Pete learned his electronics as a serviceman following high school. He then worked for IBM before switching to General Motors for over a decade before taking over the dealership. The feature failed to mention that he is a ham, with the call K8SLI, which used to be on the 147.27 repeater when it was the Putnam Amateur Radio Association. The group's name is now West Virginia Amateur Radio, Inc., and the repeater call is WC8S.

• • • •

It was nice to hear Harold, KB8XU, on the Oak Hill repeater recently while mobile. Harold doesn't talk much, just listens most of the time.

• • • •

Mike Herod, N8BHP, has moved to Oklahoma. He has not provided his valley friends with a new home packet bbs address yet. Also Frank Martin's company moved him to an area near Atlanta. He (WA8VRS) also hasn't had time to decide on a home packet bbs so friends can keep in touch via that mode.

• • • •

Now that we have crossed the line into packet talk I want to pass along something I read in the June 1988 issue of 73 Magazine. Brian Lloyd WB6RQN (5712 Stillwell Road, Rockville, Md. 20851) on page 60 began a discussion of a duplex digipeater in use by packeteers in the Washington, D.C. area. Such a repeater is similar to voice machines with different input and output frequencies and must be coordinated, and requires some changes in internal radio circuitry for packet. But what extended range? Maybe just the thing for high density packet usage areas.

• • • •

The Charleston area LAN frequency of 145.050 Mhz may be expanded. There are reports a node in Kentucky and another in southern Ohio may switch to .05. As soon as someone provides details I'll write it up.

Bob Adams, N9DMK, St. Albans, plans to remove his N9DMK-10 from the air and change it to N9DMK-5 as a THE.NET node on 145.050 Mhz. It will be installed about 100 feet up on the St. Albans community tower which is host to the WB8GDY (146.400/147.000 Mhz) and the KA8SVR (147.750/147.150 Mhz) voice repeaters.

As this is written his STAQSO:N9DMK-10 node is operating practically at ground level. It is the first converse node in this immediate area.

• • • •

Lyle Gaston and several others have ordered the German originated Digicom packet system. Each already has a Commodore 64 computer for the machine-specific program. So we may soon see Lyle (W8FG) on packet along with his cohorts Skip Zutaut, KA8QEC, Beckley; and Frank Wheeler, KJ4SU, Louisa, Ky.

• • • •

Bill, NK8Y, is new on Packet on 3/29/90 from the Hurricane area.

• • • •

I just had a bbs message from Fred Jones, WA4SWF, Louisa, Ky., asking me if I was aware of a DX node stack operating in the area on 145.090 Mhz. I told him it was nearly impossible for one ham to keep up on all the developments in the node and that he should send full details, and maybe I can write it up for a later issue of the **Journal.**

• • • •

Johnny Jones, WB8IFS sysop of the bbs with his call in South Charleston in late March put the MSYS bbs software to the test again which may be accessed via WB8CQV-2 (on 446.500 Mhz) by way of BEEUHF (crossover from BEE on 145.01 to BEEUHF outputting on 446.5 Mhz). He also has a converse node also reachable via BEEUHF. The call for the converse node is WB8CQV-1. The MBL software bbs is still operating under the call WB8CQV (No SSID).

• • • •

Charlie Boehnlein, KB8HAV, has an experimental digipeater on 145.050 Mhz at Ansted. It is PARC:KB8HAV-1, and is not a node. The Plateau ARC may upgrade the facility if enough area packeteers make use of the digipeater.

Your Source For: • **RF Connectors (all types)**
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• **Poor Man's Hardline** • **Wire**
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WW Sales
W.W. VanNuys, N400C
Rt. 6, Box 682
Fairview, NC 28730

"SHENANDOAH VALLEY AMATEUR RADIO CLUB"

40th. ANNUAL WINCHESTER HAMFEST
SUNDAY, AUGUST 5th., CLARKE COUNTY RURITAN FAIRGROUNDS, BERRYVILLE, VA.

Breakfast, Snack Bar, Ruritan's Famous Chicken & Beef Barbeque!

ARRL

APPROVED HAMFEST

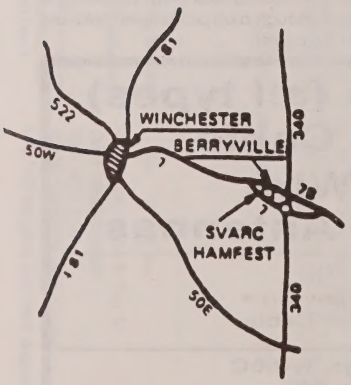
SHENANDOAH VALLEY AMATEUR RADIO CLUB INC.
W4RKC
SINCE 1948

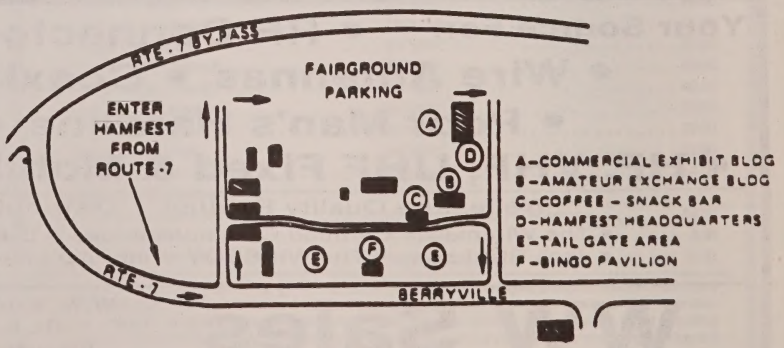
V-E EXAMS
Sunday 9AM

Talk in 146.22-82 & Simplex

Ladies' Bingo, Arts and Crafts (Non-Commercial) GRAND PRIZES and Hourly Drawings with Donations from Major Manufactures:

THREE MAJOR PRIZES





THE SERA OFFICIAL REPEATER INDEX

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SERA will not be responsible for incorrect or omitted listings. The responsibility of correct listings are those of the actual repeater owner or sponsor. We make every effort to keep the index as accurate as possible with information provided. The SERA Repeater lists contain certain repeaters which are NOT coordinated or not operating according to recognized frequency utilization plans. SERA does not necessarily condone, or recognize such repeaters as being legal or illegal. They are listed in our indexes primarily to keep our readers informed of all repeaters known in the areas served by SERA.

Repeater owners are reminded to contact their local Frequency Coordinator (Director) for assistance in coordination, changes in their listings, or any other requirements.

This by-frequency index contains repeaters in the States of Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, Virginia and West Virginia.

PLEASE NOTE: The letters column between the frequency and the city indicates suffixes of the repeater callsign.

This index is correct as of April 10, 1990.

SERA Suggested FM Simplex

146.490 146.505 146.520 146.535 146.550
146.575 146.580 146.595 147.510 147.525
147.540 147.555 147.570 147.585
223.50 or up and down 20 khz channels
446.00 or up or down 25 khz channels

SERA Suggested Digital Simplex

145.01 145.05 145.07 145.09 145.61
145.63 145.65 145.67 145.69
221.05 221.15 221.25 221.35 221.45
223.40 223.42 223.58

NOTE: Digital operators are reminded to check with local Digital Societies for which digital channels are available for various digital usage, in their particular area. Some channels are for exclusive use of LAN or BBS, etc. usage.

2 METERS

4.51 /5.11	VTA	ATLANTA	GA
	TUN	AUGUSTA	GA
	HYE	MENDENHALL	MS
	RXG	SAURATOWN MT	NC
	JMT	CONWAY	SC
	Y	COOKEVILLE	TN
	BOX	JACKSON	TN
	IJL	KNOXVILLE	TN
	ARK	NASHVLE/FAIRVIEW	TN
	YPE	RICHMOND	VA
	MCR	SALT ROCK	WV
4.53 /5.13	SEX	NEWNAN	GA
	VLP	VALDOSTA/TIFTON	GA
	YNF	AHOSKIE	NC
	CS	GREENWOOD/HODGESSC	
	CMY	CHATTANOOGA	TN
	YGI	COLLIERVILLE	TN
	OAK	LAFOLLETTE	TN
	VL	GALAX/LKOUT MT	VA
	FHE	BUCKHANNON	WV
4.55 /5.15	MM	ALBANY	GA
	AQL	ATLANTA	GA
	LI	MILLEDGEVILLE	GA
	NFK	CLARKSON	KY
	IWZ	PIKEVILLE	KY
	JTX	CHERRYVILLE	NC
	CVM	RANDLEMAN/GBO	NC
	OXE	INMAN	SC
	LWY	SUMMERTON	SC
	RJC	DECATUR-PONE KB	TN
	JXI	MEMPHIS	TN
	MJF	ALEXANDRIA	VA
	ARO	PETERSBURG	VA
	HDB	MARMET/BEE MT	WV
	FSE	MARTINSBURG	WV
4.57 /5.17	JBF	COOLIDGE	GA
	DIW	JONESBORO	GA
	PRH	HALLS GAP	KY
	ZQB	NEWTON/ANDSN MT	NC
	RVS	OXFORD	NC
	TUN	AIKEN	SC
	SK	LOUDON	TN
	BRN	MEMPHIS	TN
	LHO	MURFREESBORO	TN
	YVM	FAIRFAX	VA
	ZUA	NORFOLK	VA
	FRV	BECKLEY/BOLT	WV
4.59 /5.19	GIS	CARTERSVILLE	GA
	ULJ	PINE MT/HAMILTON	GA
	TEF	BOONEVILLE	MS
	BVW	MT MITCHELL	NC
	OTT	CARTHAGE	TN
	XX	JASPER	TN
	FAX	RICHMOND	VA
	YJJ	RICHWOOD	WV
	JGY	WHEELING	WV
4.61 /5.21	PSZ	TYRONE	GA
	U	DEANE	KY
	BOP	ERLANGER	KY
	RNW	LOUISVILLE	KY
	WRE	POPLARVILLE	MS
	TQD	TRENTON	NC
	NEP	GASTON	SC
	BBB	KNOXVILLE	TN
	ARK	NASHVILLE	TN
	LIY	TRENTON	TN
	MS	KILMARNOCK	VA
	QOJ	ROANOKE/POOR MT	VA
	FEQ	HUNTINGTON	WV
4.63 /5.23	JEH	CONYERS	GA
	UJ	DALTON	GA
	COL	WAYNESBORO	GA
	PRH	OXFORD	KY
	BFB	CHARLOTTE	NC
	RA	LAVERNE	TN
	DBB	BEDFD/APL ORCH	VA
	ORI	NEWPORT NEWS	VA
4.65 /5.25	BLQ	CLAYTON	GA
	BZJ	DALTON	GA
	KQK	FOREST PARK	GA
	GGD	GREENSBORO	NC
	URP	CHARLESTON	SC
	DWQ	ERWIN	TN
	VT	MONTGOMERY	WV
4.67 /5.27	PN	WALESKA/PNLGMT	GA
	DZJ	WIGGINS	MS
	KNI	HENDSVL/BERWLW M	NC
	BEA	RALEIGH	NC
	WZK	HENDERSONVILLE	TN
	CJX	SEV/SHIELDS MT	TN
	J	STAFFORD	VA
	VR	WYTHEVL/SAND MT	VA
	OG	CRAIGSVILLE	WV
4.69 /5.29	DRQ	ATLANTA	GA
	AGA	FRANKFORT	KY
	PL	LAWRENCEBURG	KY
	ICN	PRESTONSBURG	KY
	L	VICKSBURG	MS
	BFB	CHARLOTTE	NC
	ACP	MAYODAN	NC
	VCM	CHATTANOOGA	TN
	SQC	HOLSTN MT/J.CITY	TN
	UVH	NASHVILLE	TN
	NDH	CHESAPEAKE	VA
	ZXP	GLENVILLE	WV
4.71 /5.31	CEK	COLUMBUS	GA
	JDR	STOCKBRIDGE	GA
	ICX	LEXINGTON	NC
	GY	CHELSEA	SC
	PF	ROCK HILL	SC
	GRC	ATHENS	TN
	SC	JACKSON	TN
	ECD	LAFAYETTE	TN
	FSC	ALEXANDRIA	VA
	BZS	BECKLEY/LAYLAND	WV
4.73 /5.33	OGE	JONESBORO	GA
	CYR	GULFPORT	MS
	J	MT. AIRY	NC
	DFP	BAMBERG	SC
	DBJ	CUMBERLAND CITY	TN
	TEM	KNOXVILLE	TN
	DRL	MEM/FISHERVILLE	TN
	QQI	FARMVILLE	VA
	QC	PARSONS	WV
	MI	WILLIAMSON	WV
4.75 /5.35	DOC	ATLANTA	GA
	FGQ	ROSSVILLE	GA
	AOS	CHARLOTTE	NC
	GVK	GREENVILLE	NC
	Y	HUMBOLDT	TN
	AZJ	BLAND	VA
	AQD	FALLS CHURCH	VA
	OZT	CHARLESTON	WV
4.77 /5.37	UA	AUGUSTA	GA
	ACH	COLUMBUS	GA
	IZF	JASPER	GA
	NNX	HATTIESBURG	MS
	AGN	N. WILKESBORO	NC
	MII	OXFORD	NC
	PPD	SHALLOTTE	NC
	GRC	KNOXVILLE	TN
	OG	NASHVILLE	TN
	P	GLOUCESTER	VA
	FWL	BECKLEY/EOC	WV
4.79 /5.39	HYB	GRIFFIN	GA
	NJ	MONROE/UCARS	NC
	AM	CHATTANOOGA	TN
	EPC	GREENEVILLE	TN
	DOR	LEBANON	TN
	VM	RAMER	TN
	EOM	WESTON	WV
4.81 /5.41	PME	ATLANTA/BELL	GA
	PXX	BRNSWK/JEKYLL IS	GA
	NON	COVINGTON	KY
	BKD	GLASGOW	KY
	XO	HIGH POINT	NC
	KNU	WILLIAMSTON	NC
	TUO	GREENEVILLE	TN
	VIP	MEMPHIS	TN
	FHE	BUCKHANNON	WV
	HYX	LIBERTY	WV
4.83 /5.43	OLL	MACON	GA
	LCI	MARIETTA	GA
	ITL	SPARTA/GREEN MT	NC
	LB	COLUMBIA	SC
	YTU	BROWNSVILLE	TN
	UCE	COOKEVILLE	TN
	IUA	KNOXVILLE	TN
	SQT	RICHMOND	VA
	L	CHARLESTON	WV
	LG	MORGANTOWN	WV
4.85 /5.45	BOC	DECATUR	GA
	TX	LEXINGTON	KY
	TX	LEXINGTON	KY
	PLY	CROWDERS MT	NC
	WTX	DURHAM	NC
	GRW	NEWPORT	NC
	SIR	BENTON	TN
	KO	COLUMBIA	TN
	HAZ	MEMPHIS	TN
	KOG	MEMPHIS	TN
	E	SPRING HILL	TN
	FXC	GRANTSVILLE	WV
	SXZ	WELCH	WV
4.87 /5.47	CLA	SWEAT MT/MARIETT	GA
	WMM	WASHINGTON	KY
	OIX	KINSTON	NC
	NC	SAURATOWN MT	NC
	DDK	MYRTLE BEACH	SC
	GBI	KNOXVILLE	TN
	OMO	MOUNTAIN CITY	TN
	ARK	NASHVILLE	TN
	EFJ	ARLINGTON	VA
	FG	KINGSTON/LICK KB	WV
4.89 /5.49	JA	AUGUSTA	GA
	RWS	CORDELE	GA
	QPL	MARIETTA	GA
	PXK	CLARKSON	KY
	CWF	NICHOLASVILLE	KY
	ZCZ	FRANKLIN	NC
	BWC	RALEIGH	NC
	ABW	RKY RDG/WALLACE	SC
	KKO	MCMINVL/SHT MT	TN
	KOG	MEMPHIS	TN
	MOP	BLUEFIELD	VA
	OHX	NEWPORT NEWS	VA
	MOP	BLUEFIELD	WV
6.895/6.295	RBS	HARTWELL	GA
	SM	MACON	GA
6.01 /6.61	CVY	COLUMBUS	GA
	BDP	WARNER ROBINS	GA
	KWV	CORBIN	KY
	RNW	LOUISVILLE	KY
	KKG	LAUREL	MS
	SNI	GREENSBORO	NC
	JMS	NEW BERN	NC
	NYK	GRNVLE/CSRS HD	SC
	CMY	CHATTANOOGA	TN
	PCD	NASHVILLE	TN
	LSP	ABINGDN/BRMLY MT	VA
	GSP	CHESAPEAKE	VA
	WWQ	LYNCHBURG	VA
	MZI	GASSAWAY	WV
6.025/6.625	UPE	UNION CITY	GA
	JWP	VIDALIA	GA
	WO	PORT GIBSON	MS
	QWK	LAURINBURG	NC
	FJX	CHESTER	SC
	GBI	KNOXVILLE	TN
	ZQX	MARTIN	TN
	AVW	NEW MARKET	VA
	BZS	FLAT TOP/WINTRPL	WV
6.035/6.635	YCU	BETSY LAYNE	KY
6.04 /6.64	LWT	AUGUSTA	GA
	FWD	CARROLLTON	GA
	GBG	WAYCROSS	GA
	UXJ	CAMBELLSVILLE	KY
	ITL	JACKSON	MS
	NAY	MOOREVILLE	MS
	YAO	HENDERSONVILLE	NC
	DW	RALEIGH	NC
	NC	WINSTON-SALEM	NC
	FIQ	SUMTER	SC
	RX	CROSSVILLE	TN
	NNE	MEMPHIS	TN
	NTM	NASHVILLE	TN
	WIC	FINCASTLE	VA
	IH	MARION	VA
	QEY	RICHMOND	VA
	EZR	HUNTINGTON/CHAS	WV
6.055/6.655	NFP	ATLANTA/MARIETTA	GA
	MNI	BOWLING GREEN	KY
	CEB	CONCORD/KANNAP	NC
	VTX	ELIZABETH CITY	NC
	ABU	BROWNSVILLE	TN
	F	CHATT/SIGNAL MT	TN
	PDP	ALEXANDRIA	VA
	ISI	ALTAVISTA	VA
	BUC	UPPER TRACT	WV
6.06 /6.66	BKM	MACON	GA
6.07 /6.67	NSO	GAINESVILLE	GA
	EQL	JESUP	GA
	VHF	HAZARD	KY
	KBL	PRINCETON	KY
	CAX	BLUE MT	MS
	YGD	BURLINGTON	NC
	BKU	CHERRY MT	NC
	SJ	HALIFAX	NC
	U	ST. MATTHEWS	SC
	DKI	BRISTOL	TN
	BGW	LAFOLLETTE/WMT	TN
	NTM	NASHVILLE S.W.	TN
	HZS	BARREN SPRINGS	VA
	ZR	LEXINGTON	VA
	NTG	WILLIAMSBURG	VA
	JNU	RAVENSWOOD	WV
6.085/6.685	IWL	ADAIRSVILLE	GA
	UWN	FAYETTEVILLE	GA
	KHB	NATCHEZ	MS
	NBR	GRIFTON	NC
	O	STATESVILLE	NC
	CO	NEWBERRY	SC
	PIO	LENOIR CITY	TN
	Q	WAVERLY	TN
	HTA	VIENNA	VA
	FMD	CLARKSBURG	WV
6.10 /6.70	MM	ALBANY	GA
	OOM	JASPER	GA
	DOJ	MILLEDGEVILLE	GA
	TO	SAVANNAH	GA
	JO	GRAYSON	KY
	BDC	LOUISVILLE	KY
	YGM	UNION CITY (TN)	KY
	GY	BAY ST. LOUIS	MS
	LVA	GRENADA	MS
	DEJ	MERIDIAN	MS
	CID	DUNN	NC
	PAX	LANCASTER	SC
	UOT	MANCHESTER	TN
	UFT	MEMPHIS	TN
	YGM	UNION CITY	TN
	WQS	DANVILLE/WHT OAK	VA
	D	NORFOLK	VA
	LQC	PENNINGTON GAP	VA

DISTRIBUTION OF REPEATERS BY FREQUENCY

	XD	STAUNTON	VA
	JNU	RAVENSWOOD	WV
6.115/6.715	NVG	LAVONIA	GA
	ABZ	RINGGOLD	GA
	B	BEREA	KY
	TQY	GREENWOOD	MS
	GGN	MILLERS CREEK	NC
	KDC	SPRING LAKE	NC
	NEP	COLUMBIA	SC
	I	BLACKSBURG	VA
	TXE	STERLING	VA
	GL	SHERRARD	WV
6.13 /6.73	MM	ALBANY	GA
	NC	ATLANTA/SWEAT MT	GA
	TVE	BRUNSWICK	GA
	SWF	LOUISA	KY
	ZKK	VERSAILLES	KY
	OS	BILOXI	MS
	VZF	STARKVILLE	MS
	BWC	RALEIGH	NC
	EXU	SALISBURY	NC
	VNK	WILMINGTON	NC
	FKJ	N. AUGUSTA	SC
	BJY	SIMPSONVILLE	SC
	IOB	KNXVL/ENG MT	TN
	DAZ	MEMPHIS	TN
	WA	WATERTOWN	TN
	DHO	HAMPTON	VA
	AVZ	ALDERSON	WV
6.145/6.745	BKF	ATHENS	GA
	N	DILLON/PEE DEE	SC
	UP	COALFIELD	TN
	HF	DYERSBURG	TN
	DY	ROANOKE/POOR MT	VA
	FMD	ELK GARDEN	WV
	U	PARKERSBURG	WV
6.16 /6.76	BOC	STONE MT	GA
	APS	VALDOSTA	GA
	NSY	FERN CREEK	KY
	HBM	LEXINGTON	KY
	CUW	PADUCAH	KY
	AXQ	FLORENCE	MS
	BVW	ASHVL/MT PISGAH	NC
	GGD	GREENSBORO	NC
	S	SWANSBORO	NC
	THL	WILSON	NC
	ILT	CHARLESTON	SC
	LSP	BRISTOL/HLSTN MT	TN
	YTU	BROWNSVILLE	TN
	PQP	NASHVILLE	TN
	TFZ	CHARLOTTESVILLE	VA
	ZIN	WILLIAMSBURG	VA
	VA	HUNTINGTON	WV
	CUL	MORGANTOWN	WV
6.175/6.775	KE	MARIETTA	GA
	OCB	WRENS	GA
	PPM	MIDDLESBORO	KY
	JYH	LONG BEACH	NC
	DCD	TABOR CITY	NC
	JVO	PULASKI/MUSIC MT	TN
	MUQ	WYTHEVILLE	VA
	BWZ	ELKINS	WV
6.19 /6.79	DMK	FOLKSTON	GA
	KOW	MOULTRIE	GA
	SEX	NEWNAN	GA
	VYX	SWAINSBORO	GA
	U	PAINTSVILLE	KY
	TYP	BILOXI	MS
	S	WEST POINT	MS
	LZD	CLINTON	NC
	QDK	SAURATOWN MT	NC
	FVV	ANDERSON/SAS MT	SC
	ILT	CHARLESTON	SC
	AM	CHATTANOOGA	TN
	ABR	JOHNSON CITY	TN
	SQE	NASHVILLE	TN
	SD	CHESAPEAKE	VA
	LBL	FAIRFAX	VA
	OQC	OAK HILL	WV
6.205/6.805	LT	MILLEDGEVILLE	GA
	NNE	GUTHRIE	KY
	EWG	FAYETTEVILLE	NC
	NOQ	GASTONIA	NC
	NNE	GUTHRIE (TN/KY)	TN
	HTI	COVINGTON	VA
7.405/6.805	AQS	CALHOUN/JASPER	GA
	HCY	MAGGIE VALLEY	NC
6.22 /6.82	MM	ALBANY	GA
	DOC	ATLANTA	GA
	HAO	LYONS	GA
	MBA	GREENVILLE	MS
	MZ	MAGEE	MS
	PZA	ROARING GAP	NC
	GMP	WILMINGTON	NC
	NYK	GRNVLE/PARIS MT	SC
	OAH	LAKE CITY	TN
	BS	MEMPHIS	TN
	NCM	WINCHESTER	TN
	WWB	GATE CITY	VA
	RKC	WINCHESTER	VA
	IFS	CHARLESTON	WV
6.235/6.835	OCB	THOMPSON	GA
	QCO	ASHEVILLE	NC
	JXG	NAGS HEAD/BODIE	NC
	USH	WADESBORO	NC
	DCX	GRUNDY/BIG A MT	VA
	UTN	LEESVILLE	VA
7.435/6.835	EV	DALONEGA	GA
	BPV	HIGH POINT	NC
6.25 /6.85	DVJ	DALLAS	GA
	R	LAGRANGE	GA
	QWI	WARNER ROBINS	GA
	CLL	BOWLING GREEN	KY
	IV	PIKEVILLE	KY
	VNO	BAY ST. LOUIS	MS
	JMD	BUDE	MS
	BWW	CLEVELAND	MS
	MFK	IUKA	MS
	LWC	KOSCIUSKO	MS
	CYP	GOLDSBORO	NC
	MDW	HICKORY/BRT. MT	NC
	YFT	REIDSVILLE	NC
	ULH	FLORENCE	SC
	KJH	GTLBG/COVE MTN	TN
	KOG	MEMPHIS	TN
	PCD	NASHVILLE	TN
	POX	PORTSMOUTH	VA
	ZBP	STAUNTON	VA
	BO	BECKLEY/FLAT TOP	WV
	L	BUCKHANNON	WV
6.265/6.865	DKY	MADISON	GA
	YF	BIG KNOB/GREY CT	SC
	G	FAYETTEVILLE	TN
7.465/6.865	DWU	ELLISVILLE	MS
	ZRS	WAXHAW	NC
	E	MOUNTAIN LAKE	VA
6.28 /6.88	TOM	COLUMBUS	GA
	TDL	EVANS	GA
	IUD	MARIETTA	GA
	NKL	QUITMAN	GA
	HBB	SAVANNAH	GA
	OAU	LOUISVILLE	KY
	U	MAYTOWN	KY
	AI	SOMERSET	KY
	NNZ	JACKSON	MS
	AAY	PASCAGOULA	MS
	TQD	RALEIGH	NC
	NYR	SHELBY	NC
	AVU	COLUMBIA	SC
	CYZ	BRISTOL	TN
	ETE	MEMPHIS	TN
	TOA	NASHVILLE	TN
	SKH	OAK RIDGE	TN
	CYZ	BRISTOL	VA
	ZBE	RICHMOND	VA
	PDL	SALEM	VA
	CQV	SO. CHARLESTON	WV
6.295/6.895	JBV	INDEPENDENCE	KY
	YFF	MADISON	NC
	RAG	STANARDSVILLE	VA
	KXV	VIRGINIA BEACH	VA
6.30 /6.90	WVH	IRVINGTON	KY
	SP	FAIRMONT	WV
6.31 /6.91	FOW	CLEVELAND/LONG	GA
	HYB	GRIFFIN	GA
	GFY	MOREHEAD	KY
	VV	HERNANDO	MS
	OCM	NATCHEZ	MS
	ZGQ	AHOSKIE	NC
	MOE	ASHVL/SPIVEY MT	NC
	YZF	FAYVLLE/CFARS	NC
	IZM	LEXINGTON	NC
	BWZ	WHITE HALL	SC
	GZX	CLEVELAND	TN
	DQU	SAVANNAH	TN
	YXA	SHORT MTN	TN
	AXH	CHASE CITY	VA
	TUE	MT.LAKE/BALD KNB	VA
	HLF	TYSONS CORNER	VA
	ULB	MCMECHEN	WV
6.325/6.925	ASI	COVINGTON	GA
	PJR	JESUP	GA
	BEJ	ELIZABETHTOWN	KY
	VOJ	CORINTH	MS
	TFZ	CHARLOTTESVILLE	VA
	GJG	DANVILLE(DCC)	VA
	OGY	PRINCETON/PIPEST	WV
6.34 /6.94	N	AUGUSTA	GA
	VO	ROME/MT. ALTO	GA
	RVB	WRIGHTSVILLE	GA
	SN	ASHLAND	KY
	WZH	GLASGOW	KY
	AUZ	LEXINGTON	KY
	NTB	MURRAY	KY
	SBK	JACKSON	MS
	JMD	MCCOMB	MS
	DLH	BURGAW	NC
	BFB	CHARLOTTE	NC
	BFT	DURHAM	NC
	ACY	MANTEO/WANCHESE	NC
	ZAS	MT AIRY-RTTY	NC
	IQQ	GREENVILLE	SC
	GBI	KNOXVILLE	TN
	BN	MEMPHIS	TN
	PCD	NASHVILLE	TN
	AKZ	ABINGDON	VA
	UMI	HAMPTON	VA
	ZA	RICHMOND	VA
	AP	ROANOKE	VA
	VKB	SUMMERSVILLE	WV
	JN	WEIRTON	WV
7.54 /6.94	CSW	NEW MARTINSVLLE	WV
6.355/6.955	KIN	PERRY	GA
	PRE	ROCKY TOP MT	GA
	OCP	RABBIT HASH	KY
	NS	RINEYVILLE	KY
	ULA	ROCKINGHAM	NC
	E	ONEIDA PEAK/BLF	VA
6.37 /6.97	OD	ATLANTA	GA
	HBB	SAVANNAH	GA
	DPP	HENDERSON	KY
	MJM	MERIDIAN	MS
	ZAS	MT AIRY	NC
	JQ	SMITHFIELD	NC
	SZ	ANDERSON	SC
	ISM	FLORENCE	SC
	TRC	KNGSPT/BAYS MT	TN
	MWQ	MCMINNVILLE	TN
	BEZ	MEDINA	TN
	SKH	OAK RIDGE	TN
	FPM	MANASSAS	VA
	WRN	MIDDLEBROOK	VA
	KXV	VIRGINIA BEACH	VA
	E	LOGAN/WARD RK MT	WV
	CRW	PARKERSBURG	WV
6.38 /6.98	BEJ	ELIZABETHTOWN	KY
6.385/6.985	I	AUGUSTA	GA
	HHH	ELLIJAY/TALONA M	GA
	TOV	PRESTON	GA
	UUB	ST. MARYS	GA
	DMT	SENATOBIA	MS
	OGB	ALBEMARLE	NC
	PVE	MARION	NC
	ESG	MT PLEASANT	SC
	CA	ROANOKE/POOR MT	VA
	EIV	CHARLES TOWN	WV
6.40 /7.00	NNO	ATLANTA	GA
	UFH	CORINTH	MS
	QFX	WATER VALLEY	MS
	AZA	HIGH POINT	NC
	FVO	JACKSONVILLE	NC
	YLT	MARION	SC
	YXZ	PICKENS	SC
	AZQ	KNOXVILLE	TN
	FZJ	MEMPHIS	TN
	HMT	SUFFOLK/GASBURG	VA
	GDY	ST ALBANS	WV
7.60 /7.00	WAU	ELKHORN CITY	KY
	LR	SHELBYVILLE	KY
	BX	COLUMBUS	MS
	KMG	BLOUNTVILLE	TN
	ZOK	CHATT/SIGNAL MT	TN
	SGA	CLARKSVILLE	TN
	ZR	TERRA ALTA	WV
6.415/7.015	M	LYNCHBURG	VA
	AXO	NORTON/HIGH KNOB	VA
7.615/7.015	UHL	BONAIRE	GA
	FOW	CLEVELAND/LONG	GA
	UM	HINESVILLE	GA
	KPF	LK NORMN/CLT	NC
	UMU	SUMTER	SC
	JVV	LEBANON	TN
	KS	ROCKWOOD	TN
	YGM	UNION CITY	TN
	LNT	FREDRICKSBURG	VA
6.43 /7.03	D	LAUREL	MS
	YTZ	ROCK HILL	SC
	MVR	LEXINGTON	TN
	ZJM	MEMPHIS	TN
	ODR	MILLINGTON	TN
	JST	RICHMOND	VA
7.63 /7.03	REI	ATLANTA/AIRPORT	GA
	ZVL	HOPKINSVILLE	KY
	PJZ	LOUISVILLE	KY
	A	OWENSBORO	KY
	LDD	OCEAN SPRINGS	MS
	GG	GREENSBORO	NC
	DTS	ROANOKE RAPIDS	NC
	FOF	BARNWELL	SC
	HOG	N. MYRTLE BEACH	SC
	NIQ	FAYETTEVILLE	TN
	PRQ	MORRISTOWN	TN
	BLD	WAYNESBORO	VA
	IT	MULLINS/HRNDN MT	WV
	ECC	ST MARYS/BENS R	WV
6.445/7.045	FLR	FAYETTEVILLE	NC
	CNS	ROB/JOANNA BLD	NC
7.645/7.045	TYM	METTER	GA
	NFA	WATKINSVILLE	GA
	VF	GRETHEL	KY
	JRL	STATSVL/ASBRY MT	NC
	HKZ	COOKEVILLE	TN
	AYN	NASHVILLE	TN
	RAG	STAUNTON/EL KB	VA
	SBC	VIRGINIA BEACH	VA
6.46 /7.06	CQ	CHARLOTTE	NC
	LBM	VOLENS	VA
	PNC	PRINCETON	WV
7.66 /7.06	DDI	MACON	GA
	CLA	ROSWELL	GA
	UCJ	THOMASVILLE	GA
	WQ	PADUCAH	KY
	K	HATTIESBURG	MS
	LED	MACO	NC
	VFR	SUMTER/SHAW	SC
	MQQ	MEMPHIS	TN
	QEB	SHELBYVILLE	TN
	ECM	CHESTERFLD CO	VA
	KNM	POINT PLEASANT	WV
7.67 /7.07	NMC	LOUISVILLE	KY
6.475/7.075	GBS	MORGANTON	GA
	WRP	GIBSONVILLE	NC
7.675/7.075	JXR	LAWRENCEVILLE	GA
	TLP	OWINGSVILLE	KY
	Y	JACKSON	MS
	HBQ	BURLINGTON	NC
	L	NEWTON	NC
	GBI	KNOXVILLE	TN
	PNT	WAYNSBR/BEAR DEN	VA
	QC	MORGANTOWN	WV
7.69 /7.09	CVE	ST SIMONS ISL	GA
	ZAC	HARLAN	KY
	YK	PHELPS	KY
	DSN	AMORY	MS
	MRS	NEW HEBRON	MS
	GDF	GREENVL/ESTN NC	NC
	RDN	ORANGEBURG	SC
	JLA	SPARTANBURG	SC
	ATI	GERMANTOWN	TN
	BSA	SPARTA/BON AIR	TN
	VL	GALAX/BRIRP MT	VA
7.705/7.105	YSB	ATLANTA	GA
	D	STATESBORO	GA
	FGA	MARION	KY
	JCK	MONROE	NC
	GHH	MOUNTAIN HOME	NC
	TC	HENDERSON	TN
	JBJ	BEDFORD	VA
	JTH	MT STORM	WV
	T	SPENCER	WV
7.72 /7.12	MM	ALBANY	GA
	S	AUGUSTA	GA
	CMA	CEDARTOWN	GA
	U	BENTON	KY
	ASZ	WINCHESTER	KY
	N	ACKERMAN	MS
	REW	GAST/SPCR MT	NC
	IKY	GIBSONVILLE	NC
	EWL	ROCKY MOUNT	NC
	JMT	MYRTLE BEACH	SC
	ZYX	COLUMBIA	TN
	GMV	MEMPHIS	TN
	EAJ	OAK RIDGE	TN
	FAF	CULPEPER	VA
	DKM	BRIDGEPORT	WV
7.735/7.135	BZJ	DALTON	GA
	FRM	MILLEDGEVILLE	GA
	Y	VALDOSTA	GA
	LRQ	PETAL	MS
	CJS	BREVARD/RICH MTN	NC
	ABW	CHERAW	SC
	EDS	ALAMO	TN
	AZJ	PEARISBURG	VA
	HB	RICHMOND	VA
7.75 /7.15	TFW	ALBANY	GA
	BYK	CUMMING/SAWNEE	GA
	III	PEARL	MS
	VLY	MORGANTON	NC
	TQD	RALEIGH	NC
	BJM	MONCKS CORNER	SC
	SDT	SIMPSONVILLE	SC
	PCD	NASHVILLE	TN
	EAJ	OAK RIDGE	TN
	QJZ	JEWELL RIDGE	VA
	SVR	ST ALBANS	WV
7.765/7.165	KIN	FORSYTH	GA
	MWA	DICKS KNOB	KY
	HBM	LEXINGTON	KY
	RIS	HIGH POINT	NC
	VIA	GREENWOOD	SC
	CEX	PURYEAR	TN
	CTF	NEWPORT NEWS	VA
	FJT	WARRENTON	VA
7.78 /7.18	BMA	AUGUSTA	GA
	NHW	BALDWIN	GA
	BI	SYCAMORE	GA
	H	BAXTER	KY
	RBI	DIXON	KY
	CN	LOUISVILLE	KY
	UDQ	INVERNESS	MS
	LFP	PICAYUNE	MS
	EJJ	SANFORD	NC
	SFK	TRYON/MELROSE MT	NC
	CTJ	WILMINGTON	NC
	NAT	DORCHESTER	SC
	SC	FT MILL/CAROWND	SC
	KOG	MEMPHIS	TN
	PCD	NASHVILLE	TN
	DES	POLK CTY/OSWALD	TN
	Z	PKS KB/PULASKI	VA
	NMT	LEON	WV
7.795/7.195	SMX	ATLANTA	GA
	UCJ	CAIRO	GA
	NIN	LENOIR	NC
	WB	MURPHY	NC
	RTS	LYNCHBURG	VA
	H	HORSEPEN MT	WV
7.81 /7.21	TF	CONYERS	GA
	TO	SAVANNAH	GA
	BUZ	GREENSBORO	NC
	MSD	WHITEVILLE	NC
	AVU	LITTLE MT	SC
	WS	COOKEVILLE	TN
	KMG	HOLSTON MT/BLOUN	TN
	WKZ	JACKSON	TN
	IWG	MCLEAN	VA
	TC	CHARLESTON	WV
7.825/7.225	ZUN	JEFFERSON	GA

LVY SUMMERVILLE ..... GA
NFK LITCHFIELD ..... KY
WMH OLIVE BRANCH ..... MS
WTX HILLSBOROUGH ..... NC
DTW SANTEE ..... SC
OAH MORRISTOWN ..... TN
C HARRISONBURG ..... VA
SDC YORKTOWN ..... VA
NRK PRINCETON ..... WV
7.84 /7.24 NFG IRWINTON ..... GA
DII ASHLAND ..... KY
AVE FAIR DEALING ..... KY
AI FRANKFORT ..... KY
NAR MAYFIELD ..... KY
R TUPELO ..... MS
NIW CARTHAGE ..... NC
ACP EDEN ..... NC
PBG FOREST CITY ..... NC
GHZ FRANKLIN ..... NC
BAL HILTON HEAD ..... SC
AC LANCASTER ..... SC
BKY GALLATIN ..... TN
OG LUNENBURG CT.HSE .. VA
FQR WOODBRIDGE ..... VA
7.855/7.255 KDT ATLANTA ..... GA
CO HIGHLAND HEIGHTS ... KY
AV ASHEBORO ..... NC
KNI HENDSVL/PENIC/MT .... NC
SI PETROS/FRZ HD MT .... TN
TVS ACCOMAC ..... VA
CYZ DANTE ..... VA
VAZ MARTINSBURG ..... WV
7.885/7.255 BZU NASHVILLE ..... TN
7.87 /7.27 VBH AMERICUS ..... GA
KWT LOUISVILLE ..... KY
GEL PIKEVILLE ..... KY
USN ABERDEEN ..... MS
SXK VICKSBURG ..... MS
H BENSON ..... NC
SM WAYNESVILLE ..... NC
LET CHARLESTON ..... SC
JRJ SENECA/LONG MT .... SC
BKY GALLATIN ..... TN
FH JOHNSON CITY ..... TN
OWI MEMPHIS ..... TN
TMC PINSON ..... TN
IKL GUM SPRING ..... VA
BHP SCOTT DEPOT/COAL ... WV
7.885/7.285 EVD ASHBURN ..... GA
VBX ATLANTA/GPCO ..... GA
FGA MARION ..... KY
ADM AIKEN ..... SC
DCD MYT BEA/BRKSVLLE .... SC
MGM ROCKY SPUR ..... SC
PUX PIKEVILLE ..... TN
L MARTINSVILLE ..... VA
HON SPRUCE KNOB ..... WV
7.90 /7.30 ACY PERRY ..... GA
YSV ROME ..... GA
U SALYERSVILLE ..... KY
SJH SPRINGFIELD ..... KY
LNY MAGEE ..... MS
YJG JEFFERSON ..... NC
MZP RED SPRINGS ..... NC
OMV TUCKASEGEE ..... NC
LWS MT. PLEASANT ..... SC
BBB KNOXVILLE ..... TN
ADT MEMPHIS ..... TN
ZSA NASHVILLE ..... TN
SPS FRANKLIN ..... VA
ZR LEXINGTON ..... VA
TSC WINCH/BLUEMONT ..... VA
NSL HARRISVL/PENSBRO ... WV
7.915/7.315 REB TWIN CITY ..... GA
IL SALEM ..... KY
RBW WALKERTOWN ..... NC
UZT N. SPARTANBURG ..... SC
HFH ALEXANDRIA ..... VA
MR CLARKSBURG ..... WV
7.92 /7.32 HWQ GRUNDY ..... VA
7.93 /7.33 BXO LAGRANGE ..... GA
DIP TOCCOA ..... GA
KWH ASHLAND ..... KY
KNE MT. STERLING ..... KY
IUI PROVIDENCE ..... KY
EPP PHILADELPHIA ..... MS
LPL FAYVLLE/FT BRAGG ... NC
K LENOIR/HIBRITN ..... NC
NUY COLUMBIA ..... SC
VXW COVINGTON ..... TN
CV CROSSVILLE ..... TN
DUM LEXNGTN/ROCK MT. .. VA
ZIP WARSAW ..... VA
7.94 /7.34 NEQ ATLANTA/MARIETTA .... GA
7.945/7.345 IZD LYNCH/BLACK MT ..... KY
NYR SHELBY ..... NC
TEP WASHINGTON ..... NC
WF HENDERSONVILLE ..... TN
SJM GLADYS ..... VA
RUA FRANKLIN ..... WV
K LOGAN/SUMERCO ..... WV
7.96 /7.36 EO DOUGLASVILLE ..... GA
HZX DUBLIN ..... GA
Z LOUISVILLE ..... KY
ZAG LOUISVILLE ..... MS
SVC NATCHEZ ..... MS
KDB BOONE/RICH MTN ..... NC
LDB DURHAM ..... NC
Z LUMBERTON ..... NC
EOY COLUMBIA ..... SC
OAK KNXVL/CROSS MT ..... TN
MMI MEMPHIS ..... TN
NTM NASHVILLE S. ..... TN
KLX PARIS ..... TN
MMI POCAHONTAS ..... TN
CBB CHESTERFIELD ..... VA
OLM STUARTS DRAFT ..... VA
7/96 /7.36 CJR HATTIESBURG ..... MS
7.975/7.375 TQU ATHENS ..... GA
CO WALTON ..... KY
YN BURNSVILLE ..... NC
ROK GREENVILLE ..... NC
DMI GEORGETOWN ..... SC
LEO GREENVILLE ..... SC
ILD LYNCHBURG ..... VA
NV VIRGINIA BEACH ..... VA
LNB GRAFTON ..... WV
WMX ST ALBANS ..... WV
7.98 /7.38 NAY PONTOTOC ..... MS
7.99 /7.39 IMK THOMASTON ..... GA
NON COVINGTON ..... KY
MTN LA GRANGE ..... KY
PDJ WHTSBRG/PINE MT. ... KY
UNA PRENTISS ..... MS
CHZ AQUADALE ..... NC
PLY CHARLOTTE ..... NC
QBG EDEN/STONEVILLE ..... NC
FAU SHALLOTTE ..... NC
AC SMITHFIELD ..... NC
FEC LEXINGTON ..... SC
TA CLARKSVILLE ..... TN
ZLA DAYTON/RHEA CTY. ... TN
DWQ SULPHUR SPRINGS .... TN
AJO MADISON ..... VA
ARO PETERSBURG ..... VA
CRW PARKERSBURG ..... WV
6.19 /7.51 HBY MEMPHIS ..... TN
7.075/7.675 NGQ FRANKFORT ..... KY
7.315/7.915 SPJ FORSYTH ..... GA

220 MHZ

3.94 /2.34 DBB BEDFD/APL ORCH ..... VA
3.50 /3.50 TFZ CHARLOTTESVILLE ..... VA
2.12 /3.72 KHP STERLING PARK ..... VA
2.14 /3.74 VMI LEXINGTON ..... KY
2.30 /3.90 NSO GAINESVILLE ..... GA
RAB HERMITAGE ..... TN
2.32 /3.92 AZA HIGH POINT ..... NC
2.34 /3.94 UPC YORKVILLE ..... GA
QK ASHLAND ..... KY
BVW ASHVL/MT PISGAH ..... NC
WTX HILLSBOROUGH ..... NC
GP CLARKSVILLE ..... TN
ZJM MEMPHS/FRAYSER ..... TN
HTA VIENNA ..... VA
2.38 /3.98 APS VALDOSTA ..... GA
HUV LINWOOD ..... NC
ILY GREER ..... SC
ZSA GALLATIN ..... TN
2.40 /4.00 HQ DELTAVILLE ..... VA
2.42 /4.02 JEH CONYERS ..... GA
GLC STERLING ..... GA
EHF FAYETTEVILLE ..... NC
MDW HICKORY ..... NC
TXE LEESBURG ..... VA
2.44 /4.04 BZJ DALTON ..... GA
2.46 /4.06 UPC YORKVILLE ..... GA
N PICKENS/SASFR MT ... SC
MB ARLINGTON ..... VA
BZS FLAT TOP/WINTRPL ... WV
2.48 /4.08 GIS CARTERSVILLE ..... GA
CII RIDGEVILLE ..... SC
UEX NASHVILLE ..... TN
2.50 /4.10 F CORNELIA ..... GA
YHD FAIRFAX ..... VA
DBB ROANOKE ..... VA
2.52 /4.12 NFP ATLANTA/MARIETTA .... GA
FEC LITTLE MT. ..... SC
2.54 /4.14 WOR GREENSBORO ..... NC
QHF PICKENS/CSRS HD ..... SC
SGS FRANKLIN ..... TN
M WILLIAMSON ..... WV
2.56 /4.16 K LENOIR/HIBRITN ..... NC
2.58 /4.18 DAS VIRGINIA BEACH ..... VA
2.60 /4.20 UA AUGUSTA ..... GA
KMG BLOUNTVILLE ..... TN
YTU BROWNSVILLE ..... TN
PEA HAMPDEN-SYDNEY ..... VA
2.62 /4.22 ACP MAYODAN MT ..... NC
C ROCKY MOUNT ..... NC
FZK KNOXVILLE ..... TN
EHB SPRINGFIELD ..... TN
2.64 /4.24 KNI HENDSVL/BERWLW M. NC
2.66 /4.26 NP SHORT MTN. ..... TN
2.68 /4.28 BLR ATLANTA ..... GA
M LYNCHBURG ..... VA
2.70 /4.30 PVI STATESVILLE ..... NC
2.72 /4.32 JBF THOMASVILLE ..... GA
US CLEVELAND ..... TN
US CLEVELAND ..... TN
2.74 /4.34 DOC ATLANTA ..... GA
2.76 /4.36 TYO MARSHALL ..... NC
2.78 /4.38 RBT CLEVELAND ..... GA
GJG DANVILLE ..... VA
2.80 /4.40 BFB CHARLOTTE ..... NC
QHF PICKENS ..... SC
YGI COLLIERVILLE ..... TN
2.82 /4.42 YSV ROME ..... GA
BS MEMPHIS ..... TN
KHP FAIRFAX ..... VA
NDQ NORTON/HIGH KB ..... VA
2.84 /4.44 OG NASHVILLE ..... TN
2.86 /4.46 YON KNOXVILLE ..... TN
FUJ LOVETTSVILLE ..... VA
2.88 /4.48 PRH NORCROSS ..... GA
ZIA LOCUST ..... NC
QC PARSONS ..... WV
2.90 /4.50 TYP BILOXI ..... MS
YNY WILMINGTON ..... NC
BBB KNOXVILLE ..... TN
DRL MEM/FISHERVILLE ..... TN
BVI MARTINSVILLE ..... VA
2.92 /4.52 KSM WALESKA/PNLGMT ..... GA
2.94 /4.54 BVW MT MITCHELL ..... NC
2.96 /4.56 DOC ATL/CHESTNUT MT ..... GA
2.98 /4.58 F PIKEVILLE ..... KY
YHH SUARATOWN MT ..... NC
VFD CROSS ..... SC
3.00 /4.60 N ASHEVILLE ..... NC
NNR HIGH POINT ..... NC
HMT GASBURG/LK GASTN .. VA
3.02 /4.62 ZTL ATLANTA/BELL ..... GA
ETG PIKEVILLE ..... KY
P GLOUCESTER ..... VA
3.04 /4.64 PEN RALEIGH ..... NC
YHH WINSTON-SALEM ..... NC
MQG CHATTANOOGA ..... TN
3.06 /4.66 BKM MACON ..... GA
PLA MARS HILL ..... NC
MC NASHVILLE ..... TN
FPM MANASSAS ..... VA
3.08 /4.68 SLJ DALTON ..... GA
KPF LK NORMN/CLT ..... NC
3.10 /4.70 GY BAY ST. LOUIS ..... MS
RXG SAURATOWN MT ..... NC
ARO PETERSBURG ..... VA
3.12 /4.72 MSK MT. TOXAWAY ..... NC
KHP TYSONS CORNER ..... VA
3.14 /4.74 KVC DALTON ..... GA
TFU BURNSVILLE ..... NC
PYI DONELSON ..... TN
FG KINGSTON/LICK KB ..... WV
3.16 /4.76 BOC STONE MT. ..... GA
EXU SALISBURY ..... NC
GLA DANVLE/WHITE OAK ... VA
3.18 /4.78 D ACKERMAN ..... MS
WGY EDEN ..... NC
VCM CHATTANOOGA ..... TN
UCI JC/BUFFALO MT ..... TN
KOG MEMPHIS ..... TN
GJZ WOODBRIDGE ..... VA
3.20 /4.80 PML MORGANTON ..... NC
3.22 /4.82 C ATLANTA ..... GA
MOP LOUISVILLE ..... KY
D ACKERMAN ..... MS
DWU CANTON ..... NC
KQI GREENSBORO ..... NC
CCF ALEXANDRIA ..... VA
3.24 /4.84 ACY PERRY ..... GA
DAN GRIFTON ..... NC
OG NASHVILLE ..... TN
PLV BEDFORD ..... VA
3.26 /4.86 DWQ SULPHUR SPRINGS ..... TN
UHA HAMPTON ..... VA
3.28 /4.88 UPC YORKVILLE ..... GA
RXG SAURATOWN MT ..... NC
DRL FISHERSVILLE ..... TN
3.30 /4.90 QPL MARIETTA ..... GA
ST PONTOTOC ..... MS
EOY COLUMBIA ..... SC
ZOK CHATT/SIGNAL MT ..... TN
3.32 /4.92 NYK PARIS MT/GRNVL ..... SC
3.34 /4.94 KXO AUGUSTA ..... GA
UPC PINE LOG MT. ..... GA
EV ROSSVILLE ..... GA
NKM GREENEVILLE ..... TN
PYI NASHVILLE ..... TN
DBB ROANOKE/POOR MTN VA
3.36 /4.96 UDS CHERRYVILLE ..... NC
JVX GOLDSBORO ..... NC
WTB SAURATOWN MT ..... NC
TUN AIKEN ..... SC
OLM STUARTS DRAFT ..... VA
3.38 /4.98 JSR CUMMING/SAWNEE ..... GA
CHP FALLS CHURCH ..... VA

440 MHZ

9.45 /5.67 DOC ATLANTA ..... GA
9.25 /1.25 PXX BRNSWK/JEKYLL IS ..... GA
HUV SAURATOWN MT ..... NC
GUP LEXINGTON ..... SC
ERU MEMPHIS ..... TN
ZQ NASHVILLE ..... TN
O MOUNDSVILLE ..... WV
9.250/1.250 TPI PULASKI ..... TN
9.25 /3.25 UMU SUMTER ..... SC
GVK ALEXANDRIA ..... VA
WIN NORFOLK ..... VA
NOJ WAYNESBORO ..... VA
MM ALBANY ..... GA
AOH OWENSBORO ..... KY
NYR SHELBY ..... NC
1.25 /9.25 ERU MEMPHIS ..... TN
6.25 /9.25 FHL ROANOKE/POOR MT. ... VA
1.60 /1.60 LJV MEMPHIS ..... TN
7.00 /2.00 HMT GASBURG ..... VA
IQV MARION ..... VA
CSG WINCHESTER ..... VA
7.025/2.025 JA AUGUSTA ..... GA
7.05 /2.05 XV JASPER ..... TN
BEZ MEDINA ..... TN
7.10 /2.10 ACP MAYODAN ..... NC
ABJ MILAN ..... TN
7.125/2.125 PLP ROSSVILLE ..... GA
7.15 /2.15 BEA RALEIGH ..... NC
J CHATTANOOGA ..... TN
7.150/2.150 TPI PULASKI ..... TN
7.175/2.175 EO ROCKY FACE ..... GA
YUY ROANOKE ..... VA
7.20 /2.20 APR DECATUR ..... GA
SBX GRAY/HOLSTON MT .... TN
BJY OAKFIELD ..... TN
TXE STERLING ..... VA
LNB GRAFTON ..... WV
7.25 /2.25 IS GREENVILLE ..... SC
HTI COVINGTON ..... VA
7.275/2.275 VTT MACON ..... GA
7.30 /2.30 VFD CROSS ..... SC
7.325/2.325 JSR CHATTANOOGA ..... TN
7.40 /2.40 QHF PICKENS/CSRS HD ..... SC
YI LYNCHBG/JACK MT ..... VA
7.50 /2.50 MLF LOUISVILLE ..... KY
NTZ KNOXVILLE ..... TN
CA ROANOKE/POOR MT ... VA
7.500/2.500 YNY WILMINGTON ..... NC
7.55 /2.55 JEH CONYERS ..... GA
7.625/2.625 NSO GAINESVILLE ..... GA
EPG MEMPHIS ..... TN
7.70 /2.70 AZU SAVANNAH ..... GA
VG ROANOKE/POOR MT ... VA
7.80 /2.80 EPG JACKSON ..... TN
7.825/2.825 G MEMPHIS ..... TN
7.90 /2.90 AZA HIGH POINT ..... NC
7.925/2.925 ASI COVINGTON ..... GA
7.95 /2.95 FU LYNCHBURG ..... VA
8.00 /3.00 EO CHATSWORTH ..... GA
EOY COLUMBIA ..... SC
ZJM MEMPHIS ..... TN
VL GALAX/PT LOOKOUT ... VA
8.05 /3.05 JVX GOLDSBORO ..... NC
PUB MT JULIET ..... TN
8.10 /3.10 IZD LYNCH/BLACK MT ..... KY
GGC SAURATOWN MT ..... NC
N GRNVLE/PARIS MT ..... SC
GPM FAYETTEVILLE ..... TN
IZF MEMPHIS ..... TN
FHE BUCKHANNON ..... WV
8.15 /3.15 S AUGUSTA ..... GA
8.20 /3.20 CLA SWEAT MT ..... GA
8.25 /3.25 HTA VIENNA ..... VA
8.30 /3.30 X ATHENS ..... GA
KJH GATLBG/COVE MT ..... TN
KQI STUART/SPOON MTN .. VA
8.325/3.325 JMD STOCKBRIDGE ..... GA
JMD STOCKBRIDGE ..... GA
8.35 /3.35 LFU RICHMOND ..... VA
8.40 /3.40 WTB SAURATOWN MT ..... NC
TUN AIKEN ..... SC
DBJ CUMBERLAND CITY .... TN
QWW MEMPHIS ..... TN
8.425/3.425 SQC J.CITY/HOLSTN MT ..... TN
8.45 /3.45 VAK HIGH PT/LOOKT MT .... GA
8.50 /3.50 LVH ATLANTA ..... GA
EQC LOUISVILLE ..... KY
X LAUREL ..... MS
PQZ GREENSBORO ..... NC
WKS PARIS/GROVE HL ..... TN
GUS TYSONS CORNER ..... VA
8.55 /3.55 IN LAWRENCEVILLE ..... GA
XE ROARING GAP ..... NC
8.60 /3.60 BA MARIETTA ..... GA
HYE MENDENHALL ..... MS
DWU MT MITCHELL ..... NC
8.625/3.625 PTK JAMESTOWN ..... TN
8.65 /3.65 ZV ATLANTA ..... GA
D ACKERMAN ..... MS
UMI HAMPTON ..... VA
BON ROANOKE/POOR MT ... VA
8.70 /3.70 BA MARIETTA ..... GA
KGJ HATTIESBURG ..... MS
LXW HIGH POINT ..... NC
LBT LOCUST ..... NC
8.75 /3.75 TF COVINGTON ..... GA
EDS ALAMO ..... TN
WIC WINDY GAP MT ..... VA
8.80 /3.80 OKS JASPER/BIG BUCK ..... GA
IAT NATCHEZ ..... MS
HNK SUMMERVILLE ..... SC
NDH CHESAPEAKE ..... VA
VA INDEPENDNCE HILL ... VA
VA INDEPENDNCE HILL ... VA
JRL WYTHEVILLE ..... VA
8.85 /3.85 PN WALESKA/PNLOG MT .. GA
ULM FRANKLIN ..... TN
8.875/3.875 MZ HAW RIVER ..... NC
LZQ CAESARS HEAD ..... SC
8.90 /3.90 GWA GRIFFIN ..... GA

	EVG	CHESAPEAKE	VA
8.925/3.925	IU	RINGGOLD	GA
8.95 /3.95	RYF	MEMPHIS	TN
	NTG	WILLIAMSBURG	VA
8.975/3.975	BRN	MEMPHIS	TN
9.00 /4.00	QDX	LAWRENCEVILLE	GA
	CO	JACKSON	MS
	JEQ	HICKORY	NC
	YP	SELMA	NC
	ADT	MEMPHIS	TN
	NEI	ROCKWOOD	TN
	SN	PORTSMOUTH	VA
	IT	MULLINS/HRNDN MT	WV
9.025/4.025	MSE	STONE MT	GA
	RDK	MEMPHIS	TN
9.05 /4.05	PQD	MARIETTA	GA
	OG	NASHVILLE	TN
	AVA	GREAT FALLS	VA
	OLM	STUARTS DRAFT	VA
9.10 /4.10	MNI	BOWLING GREEN	KY
	WTT	LOUISVILLE	KY
	WUX	MERIDIAN	MS
	WTX	DURHAM	NC
	AM	CHATTANOOGA	TN
	JXT	MEMPHIS	TN
	RAG	STAIMTPM/EL KNB	VA
	LFS	WILLIAMSBURG	VA
9.15 /4.15	ZTL	ATLANTA/BELL	GA
	BJT	CLERMONT HARBOR	MS
	NTM	NASHVILLE	TN
	MB	ARLINGTON	VA
	DUM	LEXNGTN/ROCK MT	VA
	VA	SPRINGFIELD	VA
9.20 /4.20	LBM	DECATUR	GA
	U	MAYTOWN	KY
	NHN	COLUMBIA	SC
	YTU	BROWNSVILLE	TN
	NEX	MORRISTOWN	TN
	ECM	CHESTER/ENON	VA
	EZA	WAYNESBORO	VA
9.25 /4.25	BOC	ATLANTA/STONE MT	GA
	DC	GLASGOW/CVCTY	KY
	KNI	HENDSVL/BERWLW M.	NC
	F	SMITHFIELD	NC
	PAJ	BARTLETT	TN
	TFZ	CHARLOTTESVILLE	VA
9.30 /4.30	ZZD	LOUISVILLE	KY
	WOR	GREENSBORO	NC
	MNH	CHARLESTON	SC
	DRL	FISHERVILLE	TN
	GBI	KNOXVILLE	TN
	EFK	FALLS CHURCH	VA
9.325/4.325	BA	MARIETTA	GA
	VR	WYTHEVL/SAND MTN	VA
9.35 /4.35	JF	TIFTON	GA
	OCP	HIGHLAND HEIGHTS	KY
	IKY	GIBSONVILLE	NC
	BKY	GALLATIN	TN
	DBB	BEDFD/APL ORCH	VA
9.375/4.375	IZF	JASPER	GA
9.40 /4.40	UA	BLYTHE	GA
	YZF	FAYETTEVILLE	NC
	KOG	MEMPHIS	TN
	EAJ	OAK RIDGE	TN
	ARO	PETERSBURG	VA
	BZS	BECKLEY	WV
9.425/4.425	J	CHATTANOOGA	TN
	ISI	ALTAVISTA	VA
9.45 /4.45	YTU	BROWNSVILLE	TN
	KWP	GALLATIN	TN
	ZOA	FALLS CHURCH	VA
9.50 /4.50	MM	ALBANY	GA
	UWL	ATLANTA	GA
	APA	HENDERSON	KY
	MOP	LOUISVILLE	KY
	ICX	LEXINGTON	NC
	PEN	RALEIGH	NC
	LSP	BRISTOL/HLST MT	TN
	KSL	KNOXVILLE	TN
	IZF	MEMPHIS	TN
	ZAI	ALEXANDRIA	VA
	HEX	LYNCHBURG	VA
9.55 /4.55	NEF	TYRONE	GA
	VTE	GASTONIA	NC
	SBX	GRAY/HOLSTON MT	TN
	OGT	HAMPTON	VA
9.575/4.575	OG	NASHVILLE	TN
9.60 /4.60	BFB	CHARLOTTE	NC
	NK	KNOXVILLE	TN
	JXI	MEMPHIS	TN
	HFH	ALEXANDRIA	VA
	EZR	HUNTINGTON	WV
9.625/4.625	WQ	ATLANTA	GA
	E	BLUEFIELD	VA
9.65 /4.65	IBW	SMYRNA	GA
	ST	PONTOTOC	MS
	HF	SALISBURY	NC
	NKM	GREENEVILLE	TN
	ARO	RICHMOND	VA
	QC	PARSONS	WV
9.675/4.675	EBZ	NEWNAN	GA
	AY	NASHVILLE	TN
9.70 /4.70	LUQ	DALLAS	GA
	HHH	ELLIJAY TALONA M	GA
	APS	VALDOSTA	GA
	III	BRANDON	MS
	JEH	ROCKY MOUNT	NC
	DRU	MT PLEASANT	SC
	LG	MORGANTOWN	WV
9.725/4.725	NFA	WATKINSVILLE	GA
9.75 /4.75	EMM	CONYERS	GA
	VZF	STARKVILLE	MS
	TC	HENDERSON	TN
	KQI	FOREST	VA
	JYF	TYSONS CORNER	VA
9.775/4.775	NEQ	ATLANTA/MARIETTA	GA
9.80 /4.80	BEJ	ELIZABETHTOWN	KY
	CO	JACKSON	MS
	J	GREENVILLE	NC
	UY	MT AIRY/FSH PK	NC
	JXI	MEMPHIS	TN
	LP	MORRISTOWN	TN
	MIC	OILVILLE	VA
	FRV	BECKLEY/KINGSTON	WV
	CUL	MORGANTOWN	WV
9.825/4.825	ZBP	STAUNTON	VA
4.85 /4.85	BZJ	DALTON	GA
9.85 /4.85	WRE	POPLARVILLE	MS
	CQ	CHARLOTTE	NC
	GMP	WILMINGTON	NC
	ARO	RICHMOND	VA
9.875/4.875	LRD	CHATTANOOGA	TN
	BOX	JACKSON	TN
	FMD	JANE LEW	WV
9.90 /4.90	RNW	LOUISVILLE	KY
	D	ACKERMAN	MS
	COS	ASHVL/MT PISGAH	NC
	ZW	FAYETTEVILLE	NC
	VBC	NEW BERN	NC
	J	WILSON	NC
	MMI	MEMPHIS	TN
	QT	RIDGEWAY	VA
	FQR	WOODBRIDGE	VA
9.925/4.925	NNO	ATLANTA	GA
	MKG	ASHLAND	KY
	BUH	ANDERSON/SAS MT	SC
	BON	ROANOKE/LONG RDG.	VA
9.95 /4.95	I	AUGUSTA	GA
	KIN	PERRY	GA
	EJA	LEXINGTON	KY
	WXL	RALEIGH	NC
	SIR	BENTON/BEAN MT	TN
	GP	CLARKSVILLE	TN
	NNE	MEMPHIS	TN
	WRN	STAUNTON	VA
	KXV	VIRGINIA BEACH	VA
	CQV	SO. CHARLESTON	WV
9.975/4.975	YNZ	ATLANTA	GA
	TVE	BRUNSWICK	GA
	TAT	ASHLAND	KY
	NS	CUSTER	KY
	EKT	WHEELING	WV
	EKT	WHEELING	WV
6.65 /6.65	DBB	ROANOKE	VA
3.725/8.725	DN	FAIRFAX	VA
3.85 /8.85	YSV	WALUSKA/PINE LOG	GA
3.975/8.975	SDE	WOODFORD	VA
4.175/9.175	O	WINCHESTER	VA
4.225/9.225	JCE	MANASSAS	VA
4.525/9.525	VF	GRETHEL	KY
4.60 /9.60	SJH	SPRINGFIELD	KY
4.825/9.825	DOC	ATLANTA	GA
4.875/9.875	DCS	ARLINGTON	VA
	DCS	WOODBRIDGE	VA
4.925/9.925	TSC	WINCH/BLUEMONT	VA
6.25 /3.25	HEX	LYNCHBURG	VA

Repeater Owners!!! Time to Renew or Join SERA Full Membership

It's not too late to get your Repeaters listed as Full Members for the rest of the year in our index. Fee for remainder of year is $12.50. Two persons will receive the Journal. Memberships will expire December 31.

Deadline to be listed in next Journal is July 1. Submit form (or legible copy) and your check for $12.50 to:
SERA Membership, P.O. Box 215, Tobaccoville, N.C. 27050.

SouthEastern Repeater Association, Inc.

FULL REPEATER MEMBERSHIP APPLICATION FOR YEAR 1990

City/Mtn (Max 14 Char)	Callsign	Input Freq.	Output Freq.	
				No. 1
				No. 2
				No. 3
				No. 4

Name Two Full Member Representatives to SERA (Only These Two Persons Receive The Journal.)

Name _____ Call _____ Name _____ Call _____

Address _____ Address _____

City _____ State _____ Zip _____ City _____ State _____ Zip _____

Phone: ( ) _____ Phone: ( ) _____

ARRL Member ( ) Yes ( ) No ARRL Member ( ) Yes ( ) No

Membership: New_____ Renewal_____ Fee Enclosed ( ) Yes ( ) No Amount:_____

Repeater Sponsor _____ Date _____

SERA is Coordinator for NC, SC, VA, WVA, TN, KY, GA & MS.

SERA REPEATER INDEX LISTINGS BY CITY - BY STATE

GEORGIA REPEATERS

10 METERS

ALBANY	W4MM	29.58	29.68	*	L
ATL/MARIETTA	N4NEQ	29.54	29.64	N	L
ATLANTA	WB8LVH	29.52	29.62	N	L
DALTON	N4BZJ	29.58	29.68	*	AL

6 METERS

ATL/MARIETTA	WA4MPW	52.09	53.09	N	
AUGUSTA	K4EDU	52.03	53.03	N	
CARTERSVILLE	WB4AEG	52.07	53.07	*	P
CONYERS	WB4JEH	52.55	53.55	N	
FORSYTH	KB4KIN	52.13	53.13	N	
PINE LOG MT	WB4UPC	52.05	53.05	*	L
PINE LOG MT.	KE4PN	52.29	53.29	*	L

2 METERS

ADAIRSVILLE	WD4IWL	146.085	146.685	*	PAL
ALBANY	W4MM	144.55	145.15	*	L
ALBANY	W4MM	146.10	146.70	*	A
ALBANY	W4MM	146.13	146.73	*	
ALBANY	W4MM	146.22	146.82	*	
ALBANY	W4MM	147.72	147.12	*	K
ALBANY	WB4TFW	147.75	147.15	N	
AMERICUS	K4VBH	147.87	147.27	N	
ASHBURN	WD4EVD	147.885	147.285	*	PA
ATHENS	WA4BKF	146.145	146.745	*	PA
ATHENS	K4TQU	147.975	147.375	N	
ATLANTA	W4VTA	144.51	145.11	*	
ATLANTA	W4AQL	144.55	145.15	*	PAEA
ATLANTA	K4DRQ	144.69	145.29	N	
ATLANTA	W4DOC	144.75	145.35	N	
ATLANTA	W4DOC	146.22	146.82	*	PA
ATLANTA	N4OD	146.37	146.97	N	
ATLANTA	WA4NNO	146.40	147.00	N	PA
ATLANTA	K4YSB	147.705	147.105	N	R
ATLANTA	K4SMX	147.795	147.195	N	T
ATLANTA	WD4KDT	147.855	147.255	*	PAL
ATLANTA/AIRPORT	W4REI	147.63	147.03	*	
ATLANTA/BELL	W4PME	144.81	145.41	*	AEA
ATLANTA/GPCO	WA4VBX	147.885	147.285	*	
ATLANTA/MARIETTA	N4NFP	146.055	146.655	N	EAL
ATLANTA/MARIETTA	N4NEQ	147.94	147.34	N	PANB
ATLANTA/SWEAT MT	KD4NC	146.13	146.73	*	LK
AUGUSTA	W4TUN	144.51	145.11	*	A
AUGUSTA	AA4UA	144.77	145.37	*	A
AUGUSTA	N4JA	144.89	145.49	*	
AUGUSTA	W4LWT	146.04	146.64	*	K
AUGUSTA	KT4N	146.34	146.94	N	
AUGUSTA	NA4I	146.385	146.985	*	PA
AUGUSTA	NI4S	147.72	147.12	N	PA
AUGUSTA	N4BMA	147.78	147.18	N	R
BALDWIN	WD4NHW	147.78	147.18	N	A
BONAIRE	WB4UHL	147.615	147.015	N	
BRNSWK/JEKYLL IS.	KB4PXX	144.81	145.41	*	
BRUNSWICK	K4TVE	146.13	146.73	N	A
CAIRO	W4UCJ	147.795	147.195	N	EAC
CALHOUN/JASPER	KC4AQS	147.405	146.805	*	PALR
CARROLLTON	W4FWD	146.04	146.64	N	A
CARTERSVILLE	N4GIS	144.59	145.19	N	
CEDARTOWN	W4CMA	147.72	147.12	*	PA
CLAYTON	WA4BLQ	144.65	145.25	N	
CLEVELAND/LONG	K4FOW	146.31	146.91	N	
CLEVELAND/LONG	K4FOW	147.615	147.015	N	
COLUMBUS	KA4CEK	144.71	145.31	N	
COLUMBUS	K4ACH	144.77	145.37	N	R
COLUMBUS	W4CVY	146.01	146.61	N	A
COLUMBUS	WB4TOM	146.28	146.88	*	
CONYERS	WB4JEH	144.63	145.23	N	
CONYERS	KL7TF	147.81	147.21	*	PAEA
COOLIDGE	N4JBF	144.57	145.17	*	P
CORDELE	WA4RWS	144.89	145.49	N	
COVINGTON	WA4ASI	146.325	146.925	N	AL
CUMMING/SAWNEE	K4BYK	147.75	147.15	*	PAL
DALLAS	K4DVJ	146.25	146.85	N	PAEA
DALONEGA	KJ4EV	147.435	146.835	*	A
DALTON	KE4UJ	144.63	145.23	*	A
DALTON	N4BZJ	144.65	145.25	*	A
DALTON	N4BZJ	147.735	147.135	*	EAL
DECATUR	W4BOC	144.85	145.45	N	
DOUGLASVILLE	KB4EO	147.96	147.36	*	EA
DUBLIN	WA4HZX	147.96	147.36	N	
ELLIJAY/TALONA M	W4HHH	146.385	146.985	*	A
EVANS	N4TDL	146.28	146.88	*	
FAYETTEVILLE	K4UWN	146.085	146.685	N	
FOLKSTON	K4DMK	146.19	146.79	N	
FOREST PARK	K4KQK	144.65	145.25	N	
FORSYTH	W4SPJ	147.315	147.915	N	NB
FORSYTH	KB4KIN	147.765	147.165	N	
GAINESVILLE	W4NSO	146.07	146.67	*	PAEA
GRIFFIN	K4HYB	144.79	145.39	*	PA
GRIFFIN	K4HYB	146.31	146.91	*	
HARTWELL	WA4RBS	146.895	146.295	*	NB
HINESVILLE	KF4UM	147.615	147.015	*	AT
IRWINTON	WB4NFG	147.84	147.24	N	
JASPER	KB4IZF	144.77	145.37	*	RB
JASPER	W4OOM	146.10	146.70	*	
JEFFERSON	KB4ZUN	147.825	147.225	N	
JESUP	WA4EQL	146.07	146.67	*	
JESUP	N4PJR	146.325	146.925	*	PA
JONESBORO	WA4DIW	144.57	145.17	*	EA
JONESBORO	WA4OGE	144.73	145.33	N	EA
LAGRANGE	KO4R	146.25	146.85	N	O
LAGRANGE	WB4BXO	147.93	147.33	N	
LAVONIA	K4NVG	146.115	146.715	*	
LAWRENCEVILLE	WD4JXR	147.675	147.075	*	EAPA
LYONS	K4HAO	146.22	146.82	N	
MACON	WB4OLL	144.83	145.43	*	PALR
MACON	W4BKM	146.06	146.66	*	NBPA
MACON	N3SM	146.895	146.295	N	
MACON	WA4DDI	147.66	147.06	N	T
MADISON	WB4DKY	146.265	146.865	*	A
MARIETTA	K4LCI	144.83	145.43	N	EA
MARIETTA	WA4QPL	144.89	145.49	N	PA
MARIETTA	KC4KE	146.175	146.775	N	
MARIETTA	W4IUD	146.28	146.88	*	
METTER	W4TYM	147.645	147.045	N	AEA
MILLEDGEVILLE	KF4LI	144.55	145.15	*	PAT
MILLEDGEVILLE	WB4DOJ	146.10	146.70	N	PAEA
MILLEDGEVILLE	KF4LT	146.205	146.805	*	
MILLEDGEVILLE	K4FRM	147.735	147.135	*	
MORGANTON	K5GBS	146.475	147.075	N	
MOULTRIE	WD4KOW	146.19	146.79	N	
NEWNAN	K4SEX	144.53	145.13	*	PA
NEWNAN	K4SEX	146.19	146.79	*	PA
PERRY	KB4KIN	146.355	146.955	N	PAL
PERRY	WL7ACY	147.90	147.30	*	AL
PINE MT/HAMILTON	WB4ULJ	144.59	145.19	N	
PRESTON	WB4TOV	146.385	146.985	N	
QUITMAN	WA4NKL	146.28	146.88	N	
RINGGOLD	W4ABZ	146.115	146.715	N	
ROCKY TOP MT	K5PRE	146.355	146.955	N	
ROME	WB4YSV	147.90	147.30	N	
ROME/MT. ALTO	W4VO	146.34	146.94	*	PA
ROSSVILLE	W4FGQ	144.75	145.35	*	
ROSWELL	N4CLA	147.66	147.06	*	EAPA
SAVANNAH	KK4TO	146.10	146.70	*	PAEA
SAVANNAH	W4HBB	146.28	146.88	N	
SAVANNAH	W4HBB	146.37	146.97	N	A
SAVANNAH	KK4TO	147.81	147.21	*	PAEA
ST SIMONS ISL	KA4CVE	147.69	147.09	N	
ST. MARYS	KA4UUB	146.385	146.985	N	
STATESBORO	NC4D	147.705	147.105	N	
STOCKBRIDGE	WA4JDR	144.71	145.31	N	
STONE MT	W4BOC	146.16	146.76	N	
SUMMERVILLE	KA4LVY	147.825	147.225	N	
SWAINSBORO	K4VYX	146.19	146.79	N	O
SWEAT MT/MARIETTA	N4CLA	144.87	145.47	*	EAPA
SYCAMORE	KF4BI	147.78	147.18	N	
THOMASTON	K4IMK	147.99	147.39	N	
THOMASVILLE	W4UCJ	147.66	147.06	N	A
THOMPSON	WB4OCB	146.235	146.835	N	C
TOCCOA	KA4DIP	147.93	147.33	*	
TWIN CITY	N4REB	147.915	147.315	N	P
TYRONE	W4PSZ	144.61	145.21	N	PA
UNION CITY	WA4UPE	146.025	146.625	N	
VALDOSTA	W4APS	146.16	146.76	N	
VALDOSTA	KB0Y	147.735	147.135	N	A
VALDOSTA/TIFTON	WA4VLP	144.53	145.13	N	
VIDALIA	N4JWP	146.025	146.625	*	A
WALESKA/PNLGMT	KE4PN	144.67	145.27	*	L
WARNER ROBINS	WB4BDP	146.01	146.61	*	A
WARNER ROBINS	WA4QWI	146.25	146.85	*	A
WATKINSVILLE	N4NFA	147.645	147.045	*	PAEA
WAYCROSS	WA4GBG	146.04	146.64	N	
WAYNESBORO	WD4COL	144.63	145.23	*	
WRENS	WB4OCB	146.175	146.775	N	
WRIGHTSVILLE	WA4RVB	146.34	146.94	N	AL

220 MHZ

ATL/CHESTNUT MT	W4DOC	222.96	224.56	N	L
ATLANTA	N4BLR	222.68	224.28	N	
ATLANTA	W4DOC	222.74	224.34	N	
ATLANTA	KK4C	223.22	224.82	*	PALR
ATLANTA/BELL	W4ZTL	223.02	224.62	*	
ATLANTA/MARIETTA	N4NFP	222.52	224.12	N	PAL
AUGUSTA	AA4UA	222.60	224.20	*	A
AUGUSTA	WB4KXO	223.34	224.94	*	PA
CARTERSVILLE	N4GIS	222.48	224.08	N	
CLEVELAND	N4RBT	222.78	224.38	*	PA
CONYERS	WB4JEH	222.42	224.02	N	
CORNELIA	WS4F	222.50	224.10	N	
CUMMING/SAWNEE	K4JSR	223.38	224.98	*	PAL
DALTON	N4BZJ	222.44	224.04	*	
DALTON	N4SLJ	223.08	224.68	N	
DALTON	N4KVC	223.14	224.74	*	EARB
GAINESVILLE	W4NSO	222.30	223.90	*	P
MACON	W4BKM	223.06	224.66	*	
MARIETTA	WA4QPL	223.30	224.90	N	
NORCROSS	KB4PRH	222.88	224.48	*	
PERRY	WL7ACY	223.24	224.84	*	AL
PINE LOG MT.	WB4UPC	223.34	224.94	*	L
ROME	WB4YSV	222.82	224.42	N	
ROSSVILLE	KC4EV	223.34	224.94	N	
STERLING	N3GLC	222.42	224.02	N	
STONE MT	W4BOC	223.16	224.76	N	
THOMASVILLE	N4JBF	222.72	224.32	*	AL
VALDOSTA	W4APS	222.38	223.98	N	
WALESKA/PNLGMT	N4KSM	222.92	224.52	*	A
YORKVILLE	WB4UPC	222.34	223.94	*	L
YORKVILLE	WB4UPC	222.46	224.06	*	L
YORKVILLE	WB4UPC	223.28	224.88	*	

440 MHZ

ALBANY	W4MM	439.25	427.25	*	V
ALBANY	W4MM	449.50	444.50	*	
ATHENS	NB4X	448.30	443.30	*	
ATLANTA	W4DOC	444.825	449.825	N	NB
ATLANTA	WB8LVH	448.50	443.50	N	
ATLANTA	KE4ZV	448.65	443.65	*	K
ATLANTA	W4DOC	449.45	145.67	N	RB
ATLANTA	WB4UWL	449.50	444.50	*	
ATLANTA	N4WQ	449.625	444.625	N	AO
ATLANTA	WA4NNO	449.925	444.925	N	
ATLANTA	WA4YNZ	449.975	444.975	N	T
ATLANTA/BELL	W4ZTL	449.15	444.15	*	AEA
ATLANTA/MARIETTA	N4NEQ	449.775	444.775	N	PAL
ATLANTA/STONE MT	W4BOC	449.25	444.25	N	
AUGUSTA	N4JA	447.025	442.025	*	
AUGUSTA	NI4S	448.15	443.15	N	O
AUGUSTA	NA4I	449.95	444.95	*	
BLYTHE	AA4UA	449.40	444.40	*	
BRNSWK/JEKYLL IS.	KB4PXX	439.25	421.25	*	V
BRUNSWICK	K4TVE	449.975	444.975	N	
CHATSWORTH	AA4EO	448.00	443.00	N	
CONYERS	WB4JEH	447.55	442.55	N	
CONYERS	N4EMM	449.75	444.75	N	C
COVINGTON	WA4ASI	447.925	442.925	N	AL
COVINGTON	KL7TF	448.75	443.75	*	L
DALLAS	WD4LUQ	449.70	444.70	*	
DALTON	N4BZJ	444.85	444.85	*	
DECATUR	N3APR	447.20	442.20	N	A
DECATUR	WB4LBM	449.20	444.20	N	
ELLIJAY TALONA M	W4HHH	449.70	444.70	*	
GAINESVILLE	W4NSO	447.625	442.625	*	PAEA
GRIFFIN	WB4GWA	448.90	443.90	*	PA
HIGH PT/LOOKT MT.	KB4VAK	448.45	443.45	*	
JASPER	KB4IZF	449.375	444.375	*	RB
JASPER/BIG BUCK	N4OKS	448.80	443.80	N	
LAWRENCEVILLE	KK4IN	448.55	443.55	N	NB
LAWRENCEVILLE	WB4QDX	449.00	444.00	N	
MACON	K4VTT	447.275	442.275	*	AEAL
MARIETTA	KM4BA	448.60	443.60	N	PAT
MARIETTA	KM4BA	448.70	443.70	N	
MARIETTA	K4PQD	449.05	444.05	N	
MARIETTA	KM4BA	449.325	444.325	N	PATO
NEWNAN	N4EBZ	449.675	444.675	N	PA
PERRY	KB4KIN	449.95	444.95	N	PAL
RINGGOLD	KJ4IU	448.925	443.925	N	
ROCKY FACE	AA4EO	447.175	442.175	N	
ROSSVILLE	N4PLP	447.125	442.125	N	C
SAVANNAH	KC4AZU	447.70	442.70	N	C
SMYRNA	N4IBW	449.65	444.65	N	
STOCKBRIDGE	N4JMD	448.325	443.325	N	PATR
STOCKBRIDGE	N4JMD	448.325	443.325	N	
STONE MT	N4MSE	449.025	444.025	N	
SWEAT MT	N4CLA	448.20	443.20	N	
TIFTON	KF4JF	449.35	444.35	N	
TYRONE	K4NEF	449.55	444.55	N	
VALDOSTA	W4APS	449.70	444.70	N	
WALESKA/PNLOG	MTKE4PN	448.85	443.85	*	L
WALUSKA/PINE LOG	WB4YSV	443.85	448.85	N	NB
WATKINSVILLE	N4NFA	449.725	444.725	*	PAEA

920 MHZ

AUGUSTA	AA4UA	940.00	440.00	*	A

1270 MHZ

ATL/CHESTNUT MT	W4DOC	1291.40	1271.40	N	
ATLANTA/BELL	KB4KIN	1272.00	1292.00	N	
CALHOUN/JASPER	KC4AQS	1292.00	1272.00	*	PALR

KENTUCKY REPEATERS

6 METERS

GUTHRIE	KA4ZKL	52.23	53.23	N	C
LOUISVILLE	WB4LBR	52.025	53.025	N	

2 METERS

ASHLAND	KD4SN	146.34	146.94	*	
ASHLAND	KA4DII	147.84	147.24	N	PA
ASHLAND	WA8KWH	147.93	147.33	*	A
BAXTER	WM4H	147.78	147.18	N	
BENTON	WG4U	147.72	147.12	N	
BEREA	KI4B	146.115	146.715	N	
BETSY LAYNE	WA4YCU	146.035	146.635	N	
BOWLING GREEN	WD4MNI	146.055	146.655	*	PAEA
BOWLING GREEN	KA4CLL	146.25	146.85	N	
CAMBELLSVILLE	WA4UXJ	146.04	146.64	N	
CLARKSON	KB4NFK	144.55	145.15	N	
CLARKSON	N4PXK	144.89	145.49	N	
CORBIN	WD4KWV	146.01	146.61	*	
COVINGTON	WB8NON	144.81	145.41	*	
COVINGTON	WB8NON	147.99	147.39	*	A
DEANE	AK4U	144.61	145.21	*	L
DICKS KNOB	N4MWA	147.765	147.165	*	
DIXON	WD4RBI	147.78	147.18	N	

MORE KENTUCKY REPEATERS

ELIZABETHTOWN	W4BEJ	146.325	146.925	*	
ELIZABETHTOWN	W4BEJ	146.38	146.98	*	AL
ELKHORN CITY	WB4WAU	147.60	147.00	*	
ERLANGER	N4BOP	144.61	145.21	N	
FAIR DEALING	N4AVE	147.84	147.24	N	
FERN CREEK	WB4NSY	146.16	146.76	N	A
FRANKFORT	KB4AGA	144.69	145.29	N	
FRANKFORT	K4NGQ	147.075	147.675	N	
FRANKFORT	KC4AI	147.84	147.24	N	
GLASGOW	KA0BKD	144.81	145.41	N	L
GLASGOW	W4WZH	146.34	146.94	*	A
GRAYSON	KF4JO	146.10	146.70	N	
GRETHEL	KJ4VF	147.645	147.045	N	C
GUTHRIE	KA4NNE	146.205	146.805	N	
HALLS GAP	WD8PRH	144.57	145.17	N	AL
HARLAN	WA4ZAC	147.69	147.09	N	
HAZARD	K4VHF	146.07	146.67	*	
HENDERSON	K4DPP	146.37	146.97	N	
HIGHLAND HEIGHTS	K4CO	147.855	147.255	N	
HOPKINSVILLE	WA4ZVL	147.63	147.03	N	A
INDEPENDENCE	K4JBV	146.295	146.895	*	A
IRVINGTON	WB4WVH	146.30	146.90	*	AEA
LA GRANGE	W4MTN	147.99	147.39	N	
LAWRENCEBURG	KK4PL	144.69	145.29	*	A
LEXINGTON	KC4TX	144.85	145.45	*	PA
LEXINGTON	KC4TX	144.85	145.45	N	
LEXINGTON	WA4HBM	146.16	146.76	*	PAEA
LEXINGTON	W4AUZ	146.34	146.94	N	
LEXINGTON	WA4HBM	147.765	147.165	*	
LITCHFIELD	KB4NFK	147.825	147.225	*	
LOUISA	WA4SWF	146.13	146.73	*	EA
LOUISVILLE	WD4RNW	144.81	145.21	N	
LOUISVILLE	WD4RNW	146.01	146.61	N	
LOUISVILLE	W4BDC	146.10	146.70	*	PAEA
LOUISVILLE	W4OAU	146.28	146.88	N	PA
LOUISVILLE	W4PJZ	147.63	147.03	N	
LOUISVILLE	N4NMC	147.67	147.07	*	PAEA
LOUISVILLE	W4CN	147.78	147.18	*	PAEA
LOUISVILLE	N4KWT	147.87	147.27	N	
LOUISVILLE	KQ9Z	147.96	147.36	*	
LYNCH/BLACK MT	N4IZD	147.945	147.345	N	
MARION	KA4FGA	147.705	147.105	N	
MARION	KA4FGA	147.885	147.285	N	
MAYFIELD	WA4NAR	147.84	147.24	N	
MAYTOWN	AK4U	146.28	146.88	*	PALR
MIDDLESBORO	W4PPM	146.175	146.775	N	
MOREHEAD	K4GFY	146.31	146.91	N	
MT. STERLING	WD4KNE	147.93	147.33	N	PA
MURRAY	WB4NTB	146.34	146.94	*	A
NICHOLASVILLE	WB4CWF	144.89	145.49	*	PA
OWENSBORO	NW4A	147.63	147.03	N	
OWINGSVILLE	N4TLP	147.675	147.075	N	A
OXFORD	WD8PRH	144.63	145.23	N	AL
PADUCAH	K4CUW	146.16	146.76	N	
PADUCAH	W4WQ	147.66	147.06	N	
PAINTSVILLE	AK4U	146.19	146.79	*	PAL
PHELPS	KJ4YK	147.69	147.09	*	
PIKEVILLE	N4IWZ	144.55	145.15	*	PARB
PIKEVILLE	KM4IV	146.25	146.85	N	EAL
PIKEVILLE	WB4GEL	147.87	147.27	N	PA
PRESTONSBURG	K4ICN	144.69	145.29	*	RBO
PRINCETON	W4KBL	146.07	146.67	N	
PROVIDENCE	N4IUI	147.93	147.33	N	
RABBIT HASH	WA4OCP	146.355	146.955	N	
RINEYVILLE	KE4NS	146.355	146.955	*	
SALEM	N4IL	147.915	147.315	N	
SALYERSVILLE	AK4U	147.90	147.30	*	L
SHELBYVILLE	KE4LR	147.60	147.00	*	PA
SOMERSET	N4AI	146.28	146.88	N	
SPRINGFIELD	WA4SJH	147.90	147.30	*	A
UNION CITY (TN)	WA4YGM	146.10	146.70	N	
VERSAILLES	WA4ZXK	146.13	146.73	N	
WALTON	K4CO	147.975	147.375	N	
WASHINGTON	WA4WMM	144.87	145.47	N	C
WHTSBRG/PINE MT	WD4PDJ	147.99	147.39	N	
WINCHESTER	WB4ASZ	147.72	147.12	*	AEA

220 MHZ

ASHLAND	KC4QK	222.34	223.94	N	
LEXINGTON	WB8VMI	222.14	223.74	*	
LOUISVILLE	W4MOP	223.22	224.82	N	
PIKEVILLE	WB4F	222.98	224.58	N	
PIKEVILLE	N4ETG	223.02	224.62	N	A

440 MHZ

ASHLAND	KA4MKG	449.925	444.925	N	C
ASHLAND	WB4TAT	449.975	444.975	*	
BOWLING GREEN	WD4MNI	449.10	444.10	*	LC
CUSTER	KE4NS	449.975	444.975	N	
ELIZABETHTOWN	W4BEJ	449.80	444.80	*	L
GLASGOW/CVCTY	KF4DC	449.25	444.25	*	
GRETHEL	KJ4VF	444.525	449.525	N	C
HENDERSON	N9APA	449.50	444.50	N	
HIGHLAND HEIGHTS	WA4OCP	449.35	444.35	N	
LEXINGTON	WD4EJA	449.95	444.95	N	
LOUISVILLE	WA4MLF	447.50	442.50	*	AL
LOUISVILLE	WD9EQC	448.50	443.50	*	
LOUISVILLE	KA4WTT	449.10	444.10	*	PAEA
LOUISVILLE	WB4ZZD	449.30	444.30	N	
LOUISVILLE	W4MOP	449.50	444.50	N	
LOUISVILLE	WD4RNW	449.90	444.90	N	
LYNCH/BLACK MT	N4IZD	448.10	443.10	N	
MAYTOWN	AK4U	449.20	444.20	*	L
OWENSBORO	WB4AOH	439.25	427.25	N	V
SPRINGFIELD	WA4SJH	444.60	449.60	*	

MISSISSIPPI REPEATERS

10 METERS

POPLARVILLE	WA5WRE	29.52	29.62	*	A

6 METERS

HATTIESBURG	N5ILU	52.05	53.05	*	L
LAUREL	N5DWU	52.01	53.01	*	L

2 METERS

ABERDEEN	WB5USN	147.87	147.27	N	A
ACKERMAN	NO5N	147.72	147.12	N	
AMORY	KB5DSN	147.69	147.09	N	
BAY ST. LOUIS	N5GY	146.10	146.70	N	
BAY ST. LOUIS	K0VNO	146.25	146.85	N	
BILOXI	K5OS	146.13	146.73	N	
BILOXI	K5TYP	146.19	146.79	N	
BLUE MT.	N5CAX	146.07	146.67	N	A
BOONEVILLE	WA5TEF	144.59	145.19	*	
BUDE	K5JMD	146.25	146.85	N	
CLEVELAND	K5BWW	146.25	146.85	N	
COLUMBUS	K5BX	147.60	147.00	*	A
CORINTH	WB5VOJ	146.325	146.925	N	
CORINTH	K5UFH	146.40	147.00	N	
ELLISVILLE	N5DWU	147.465	146.865	*	PALT
FLORENCE	W5AXQ	146.16	146.76	N	
GREENVILLE	WA5MBA	146.22	146.82	N	A
GREENWOOD	KA5TQY	146.115	146.715	N	
GRENADA	WB5LVA	146.10	146.70	N	
GULFPORT	KA5CYR	144.73	145.33	N	A
HATTIESBURG	KA5NNX	144.77	145.37	N	
HATTIESBURG	KC5K	147.66	147.06	*	LRB
HATTIESBURG	W5CJR	147/96	147.36	*	
HERNANDO	K5VV	146.31	146.91	*	A
INVERNESS	WA5UDQ	147.78	147.18	N	
IUKA	WB5MFK	146.25	146.85	N	A
JACKSON	W5ITL	146.04	146.64	N	
JACKSON	W5NNZ	146.28	146.88	N	
JACKSON	KA5SBK	146.34	146.94	N	
JACKSON	NC5Y	147.675	147.075	N	A
KOSCIUSKO	W5LWC	146.25	146.85	N	
LAUREL	N5KKG	146.01	146.61	*	A
LAUREL	WV5D	146.43	147.03	N	
LOUISVILLE	WB5ZAG	147.96	147.36	N	A
MAGEE	KG5MZ	146.22	146.82	*	TLC
MAGEE	KA5LNY	147.90	147.30	*	PA
MCCOMB	K5JMD	146.34	146.94	N	A
MENDENHALL	K5HYE	144.51	145.11	*	P
MERIDIAN	W5DEJ	146.10	146.70	*	A
MERIDIAN	KA5MJM	146.37	146.97	*	PARB
MOOREVILLE	WB5NAY	146.04	146.64	N	A
NATCHEZ	W5KHB	146.085	146.685	*	
NATCHEZ	K5OCM	146.31	146.91	N	A
NATCHEZ	K5SVC	147.96	147.36	N	
NEW HEBRON	N5MRS	147.69	147.09	*	AEAT
OCEAN SPRINGS	W5LDD	147.63	147.03	*	A
OLIVE BRANCH	KA5WMH	147.825	147.225	N	
PASCAGOULA	N5AAY	146.28	146.88	N	A
PEARL	N5III	147.75	147.15	N	
PETAL	N5LRQ	147.735	147.135	*	
PHILADELPHIA	N5EPP	147.93	147.33	*	
PICAYUNE	K5LFP	147.78	147.18	N	A
PONTOTOC	WB5NAY	147.98	147.38	N	
POPLARVILLE	WA5WRE	144.61	145.21	*	A
PORT GIBSON	KE5WO	146.025	146.625	N	
PRENTISS	WB5UNA	147.99	147.39	*	
SENATOBIA	KB5DMT	146.385	146.985	N	
STARKVILLE	W5VZF	146.13	146.73	*	A
TUPELO	AI5R	147.84	147.24	N	A
VICKSBURG	WJ5L	144.69	145.29	N	
VICKSBURG	WB5SXK	147.87	147.27	N	
WATER VALLEY	WB5QFX	146.40	147.00	N	
WEST POINT	KO5S	146.19	146.79	N	A
WIGGINS	KB5DZJ	144.67	145.27	*	

220 MHZ

ACKERMAN	NM5D	223.18	224.78	N	
ACKERMAN	NM5D	223.22	224.82	N	
BAY ST. LOUIS	K5GY	223.10	224.70	N	
BILOXI	K5TYP	222.90	224.50	N	
PONTOTOC	KE5ST	223.30	224.90	N	

440 MHZ

ACKERMAN	NM5D	448.65	443.65	N	
ACKERMAN	NM5D	449.90	444.90	N	
BRANDON	N5III	449.70	444.70	N	
CLERMONT HARBOR	WD5BJT	449.15	444.15	N	A
HATTIESBURG	W4KGJ	448.70	443.70	*	L
JACKSON	KB5CO	449.00	444.00	N	
JACKSON	KB5CO	449.80	444.80	N	
LAUREL	AJ0X	448.50	443.50	*	ARB
MENDENHALL	K5HYE	448.60	443.60	*	C
MERIDIAN	WA5WUX	449.10	444.10	*	PAEA
NATCHEZ	N5IAT	448.80	443.80	N	A
PONTOTOC	KE5ST	449.65	444.65	N	
POPLARVILLE	WA5WRE	449.85	444.85	*	
STARKVILLE	W5VZF	449.75	444.75	*	

This SERA Official Repeater Index Is Correct As of April 10, 1990

NORTH CAROLINA REPEATERS

10 METERS

MAYODAN	WA4ACP	29.56	29.66	N	T
NEWPORT	K4GRW	29.56	29.66	*	P
WILKESBORO	KC4XE	29.52	29.62	*	L

6 METERS

ANDERSON MT.	WA4PXV	52.05	53.05	*	RBL
HIGH POINT	K4AZA	52.525	52.525	N	RB
NEWPORT	K4GRW	52.01	53.01	*	P
RALEIGH	WA4PEN	52.03	53.03	*	
RALEIGH/BUTNER	WB4RZF	52.25	53.25	N	C

2 METERS

AHOSKIE	WB4YNF	144.53	145.13	N	A
AHOSKIE	WA4ZGQ	146.31	146.91	*	PA
ALBEMARLE	K4OGB	146.385	146.985	*	A
AQUADALE	WA4CHZ	147.99	147.39	*	
ASHEBORO	KJ4AV	147.855	147.255	*	PAL
ASHEVILLE	WA4QCO	146.235	146.835	N	
ASHVL/MT PISGAH	WA4BVW	146.16	146.76	*	
ASHVL/SPIVEY MT	W4MOE	146.31	146.91	*	A
BENSON	AK4H	147.87	147.27	*	PA
BOONE/RICH MTN	WA4KDB	147.96	147.36	*	
BREVARD/RICH MTN	WB4CJS	147.735	147.135	*	A
BURGAW	W4DLH	146.34	146.94	*	
BURLINGTON	WA4YGD	146.07	146.67	*	A
BURLINGTON	WA4HBQ	147.675	147.075	N	EA
BURNSVILLE	N4YN	147.975	147.375	N	A
CARTHAGE	W4NIW	147.84	147.24	*	PAK
CHARLOTTE	W4BFB	144.63	145.23	N	
CHARLOTTE	W4BFB	144.69	145.29	N	A
CHARLOTTE	WA4AOS	144.75	145.35	N	L
CHARLOTTE	W4BFB	146.34	146.94	N	A
CHARLOTTE	W4CQ	146.46	147.06	*	A
CHARLOTTE	WD4PLY	147.99	147.39	N	PA
CHERRY MT	WA4BKU	146.07	146.67	N	
CHERRYVILLE	K4JTX	144.55	145.15	N	
CLINTON	WA4LZD	146.19	146.79	N	
CONCORD/KANNAPOLIS	K4CEB	146.055	146.655	*	PA
CROWDERS MT	WD4PLY	144.85	145.45	*	
DUNN	N4CID	146.10	146.70	*	PA
DURHAM	WA4WTX	144.85	145.45	*	AL
DURHAM	WA4BFT	146.34	146.94	N	A
DURHAM	WD4LDB	147.96	147.36	*	A
EDEN	WA4ACP	147.84	147.24	N	T
EDEN/STONEVILLE	WA4QBG	147.99	147.39	*	
ELIZABETH CITY	WA4VTX	146.055	146.655	N	A
FAYETTEVILLE	N4EWG	146.205	146.805	*	
FAYETTEVILLE	WA4FLR	146.445	147.045	N	R
FAYVLLE/CFARS	WB4YZF	146.31	146.91	*	PA
FAYVLLE/FT BRAGG	W4LPL	147.93	147.33	*	
FOREST CITY	K4PBG	147.84	147.24	*	A
FRANKLIN	W4ZCZ	144.89	145.49	*	
FRANKLIN	W4GHZ	147.84	147.24	*	
GAST/SPCR MT	W4REW	147.72	147.12	*	A
GASTONIA	K4NOQ	146.205	146.805	N	PA
GIBSONVILLE	KB4WRP	146.475	147.075	*	
GIBSONVILLE	WB4IKY	147.72	147.12	*	ARB
GOLDSBORO	K4CYP	146.25	146.85	*	A
GREENSBORO	N4GGD	144.65	145.25	N	A
GREENSBORO	K4SNI	146.01	146.61	*	A
GREENSBORO	N4GGD	146.16	146.76	N	
GREENSBORO	W4GG	147.63	147.03	*	PAL
GREENSBORO	W4BUZ	147.81	147.21	N	
GREENVILLE	N4GVK	144.75	145.35	*	AEAL
GREENVILLE	K4ROK	147.975	147.375	*	A
GREENVL/ESTN NC	W4GDF	147.69	147.09	*	
GRIFTON	W4NBR	146.085	146.685	*	
HALIFAX	AA4SJ	146.07	146.67	N	A
HENDERSONVILLE	WB4YAO	146.04	146.64	N	L
HENDSVL/BERWLW	WA4KNI	144.67	145.27	*	A
HENDSVL/PENIC/MTW	AA4KNI	147.855	147.255	*	A
HICKORY/BRT. MT	WA4MDW	146.25	146.85	N	
HIGH POINT	N4XO	144.81	145.41	*	A
HIGH POINT	K4AZA	146.40	147.00	N	LA
HIGH POINT	KB4BPV	147.435	146.835	N	PAL
HIGH POINT	WA4RIS	147.765	147.165	*	PA
HILLSBOROUGH	WA4WTX	147.825	147.225	*	AL

SERA REPEATER SYMBOLS

*	Full Member Supporter	T	Tone Access Repeater
D	Delinquent Membership	L	Linked Repeater
N	Non-Member SERA	K	Packet Operation
NB	Non On SERA Freq. Plan	R	Radioteletype Operation
M	T-MARC Terr. Repeater	V	Television (SSTV or ATV)
A	Autopatch (Open)	P	Proposed Rpt. Coord.
PA	Private Autopatch	C	Under Construction
EA	Emergency Autopatch	O	Off the Air Temporarily
RB	Remote Base System		

NOTE: Some repeaters allow voice, as well as other functions on their machine. Generally the second function is indicated, but it does not necessarily mean the machine is solely operated in that mode. Operators may check with owners for information. Repeaters with normal input/output (pairs) are listed in the regular FM repeater index and their operation of Packet is indicated with "K".

MORE NORTH CAROLINA REPEATERS

JACKSONVILLE	WD4FVO	146.40	147.00	*	AEA
JEFFERSON	W4YJG	147.90	147.30	*	A
KINSTON	W4OIX	144.87	145.47	*	A
LAURINBURG	K4QWK	146.025	146.625	*	PAEA
LENOIR	N4NIN	147.795	147.195	*	
LENOIR/HIBRITN	KN4K	147.93	147.33	*	
LEXINGTON	WD4ICX	144.71	145.31	N	AEA
LEXINGTON	K4IZM	146.31	146.91	N	AEA
LK NORMN/CLT	WB4KPF	147.615	147.015	*	PA
LONG BEACH	K4JYH	146.175	146.775	*	
LUMBERTON	WV4Z	147.96	147.36	*	PA
MACO	W4ALED	147.66	147.06	*	PA
MADISON	KA4YFF	146.295	146.895	N	
MAGGIE VALLEY	W4HCY	147.405	146.805	*	O
MANTEO/WANCHESE	W4ACY	146.34	146.94	*	
MARION	WD4PVE	146.385	146.985	N	A
MAYODAN	WA4ACP	144.69	145.29	N	
MILLERS CREEK	N4GGN	146.115	146.715	*	A
MONROE	K4JCK	147.705	147.105	N	A
MONROE/UCARS	KF4NJ	144.79	145.39	*	PA
MORGANTON	K4VLY	147.75	147.15	*	
MOUNTAIN HOME	K4GHH	147.705	147.105	*	
MT AIRY	WA4ZAS	146.37	146.97	N	
MT AIRY-RTTY	WA4ZAS	146.34	146.94	N	R
MT MITCHELL	WA4BVW	144.59	145.19	*	
MT. AIRY	KD4J	144.73	145.33	*	A
MURPHY	KC4WB	147.795	147.195	N	
N. WILKESBORO	N4AGN	144.77	145.37	*	PA
NAGS HEAD/BODIE	N4JXG	146.235	146.835	*	PAEA
NEW BERN	WD4JMS	146.01	146.61	*	AL
NEWPORT	K4GRW	144.85	145.45	*	ALO
NEWTON	AG4L	147.675	147.075	*	AEAR
NEWTON/ANDSN MTW	4ZQB	144.57	145.17	N	
OXFORD	KA4RVS	144.57	145.17	*	PA
OXFORD	WA4MII	144.77	145.37	*	
RALEIGH	N4BEA	144.67	145.27	*	PAL
RALEIGH	K4BWC	144.89	145.49	*	R
RALEIGH	W4DW	146.04	146.64	*	PA
RALEIGH	K4BWC	146.13	146.73	*	PA
RALEIGH	WB4TQD	146.28	146.88	*	L
RALEIGH	WB4TQD	147.75	147.15	N	PA
RANDLEMAN/GBO	WD4CVM	144.55	145.15	*	L
RED SPRINGS	W4MZP	147.90	147.30	*	PA
REIDSVILLE	K4YFT	146.25	146.85	*	
ROANOKE RAPIDS	WA4DTS	147.63	147.03	*	PA
ROARING GAP	WB4PZA	146.22	146.82	*	
ROB/JOANNA BLD	WD4CNS	146.445	147.045	N	
ROCKINGHAM	WA4ULA	146.355	146.955	N	
ROCKY MOUNT	K4EWL	147.72	147.12	*	EA
SALISBURY	W4EXU	146.13	146.73	*	EAL
SANFORD	WB4EJJ	147.78	147.18	N	A
SAURATOWN MT	W4RXG	144.51	145.11	*	R
SAURATOWN MT	W4NC	144.87	145.47	*	
SAURATOWN MT	N4QDK	146.19	146.79	N	PA
SHALLOTTE	K4PPD	144.77	145.37	*	PAEA
SHALLOTTE	N4FAU	147.99	147.39	*	PAEA
SHELBY	W4NYR	146.28	146.88	*	
SHELBY	W4NYR	147.945	147.345	*	PA
SMITHFIELD	KD4JQ	146.37	146.97	*	A
SMITHFIELD	W2AC	147.99	147.39	N	
SPARTA/GREEN MT	K4ITL	144.83	145.43	N	L
SPRING LAKE	WB4KDC	146.115	146.715	N	
STATESVILLE	AI4O	146.085	146.685	*	PA
STATSVL/ASBRY MT	WA4JRL	147.645	147.045	N	R
SWANSBORO	KO4S	146.16	146.76	*	A
TABOR CITY	W4DCD	146.175	146.775	N	ALRB
TRENTON	WB4TQD	144.61	145.21	*	L
TRYON/MELROSE MT	WB4SFK	147.78	147.18	*	C
TUCKASEGEE	W8OMV	147.90	147.30	N	
WADESBORO	W4USH	146.235	146.835	*	
WALKERTOWN	WA4RBW	147.915	147.315	*	
WASHINGTON	WA4TEP	147.945	147.345	*	
WAXHAW	WA4ZRS	147.465	146.865	*	PA
WAYNESVILLE	N4SM	147.87	147.27	*	A
WHITEVILLE	K4MSD	147.81	147.21	*	AL
WILLIAMSTON	KA4KNU	144.81	145.41	*	A
WILMINGTON	W4VNK	146.13	146.73	*	PA
WILMINGTON	K4GMP	146.22	146.82	*	L
WILMINGTON	N4CTJ	147.78	147.18	N	AL
WILSON	WB4THL	146.16	146.76	N	A
WINSTON-SALEM	W4NC	146.04	146.64	*	AL

220 MHZ

ASHEVILLE	NC4N	223.00	224.60	*	A
ASHVL/MT PISGAH	WA4BVW	222.34	223.94	*	
BURNSVILLE	N4TFU	223.14	224.74	N	
CANTON	N4DWU	223.22	224.82	*	PA
CHARLOTTE	W4BFB	222.80	224.40	N	A
CHERRYVILLE	WB4UDS	223.36	224.96	N	
EDEN	WA4WGY	223.18	224.78	*	
FAYETTEVILLE	W4EHF	222.42	224.02	*	L
GOLDSBORO	WB3JVX	223.36	224.96	*	EAT
GREENSBORO	KB4KQI	223.22	224.82	N	PAL
GRIFTON	WA4DAN	223.24	224.84	*	L
HENDSVL/BERWLW	MW4AKNI	222.64	224.24	*	
HICKORY	WA4MDW	222.42	224.02	N	
HIGH POINT	K4AZA	222.32	223.92	N	LA
HIGH POINT	N4NNR	223.00	224.60	*	PAL
HILLSBOROUGH	WA4WTX	222.34	223.94	*	L
LENOIR/HIBRITN	KN4K	222.56	224.16	*	
LINWOOD	KA4HUV	222.38	223.98	N	
LK NORMN/CLT	WB4KPF	223.08	224.68	*	
LOCUST	WA4ZIA	222.88	224.48	*	PAL
MARS HILL	WB4PLA	223.06	224.66	N	
MARSHALL	KA4TYO	222.76	224.36	N	L
MAYODAN MT	WA4ACP	222.62	224.22	N	T
MORGANTON	WB4PML	223.20	224.80	*	T
MT MITCHELL	WA4BVW	222.94	224.54	*	
MT. TOXAWAY	K4MSK	223.12	224.72	N	
RALEIGH	WA4PEN	223.04	224.64	*	PAL
ROCKY MOUNT	NF4C	222.62	224.22	*	ARB
SALISBURY	W4EXU	223.16	224.76	*	L
SAURATOWN MT	WA4YHH	222.98	224.58	*	
SAURATOWN MT	W4FRXG	223.10	224.70	*	R
SAURATOWN MT	W4FRXG	223.28	224.88	*	
SAURATOWN MT	WA4WTB	223.36	224.96	*	
STATESVILLE	WA4PVI	222.70	224.30	N	
WILMINGTON	K4YNY	222.90	224.50	*	LRB
WINSTON-SALEM	WA4YHH	223.04	224.64	*	PA

440 MHZ

ASHVL/MT PISGAH	WA4COS	449.90	444.90	N	
CHARLOTTE	W4BFB	449.60	444.60	N	
CHARLOTTE	W4CQ	449.85	444.85	*	A
DURHAM	WA4WTX	449.10	444.10	*	AL
FAYETTEVILLE	WB4YZF	449.40	444.40	*	
FAYETTEVILLE	KB4ZW	449.90	444.90	N	P
GASTONIA	WB4VTE	449.55	444.55	N	
GIBSONVILLE	WB4IKY	449.35	444.35	*	C
GOLDSBORO	WB3JVX	448.05	443.05	*	EAL
GREENSBORO	WD4PQZ	448.50	443.50	*	ALRB
GREENSBORO	WB4WOR	449.30	444.30	*	C
GREENVILLE	AI4J	449.80	444.80	N	
HAW RIVER	K2MZ	448.875	443.875	*	T
HENDSVL/BERWLW	MW4AKNI	449.25	444.25	*	
HICKORY	K4JEQ	449.00	444.00	*	O
HIGH POINT	K4AZA	447.90	442.90	N	L
HIGH POINT	N4LXW	448.70	443.70	N	
LEXINGTON	WD4ICX	449.50	444.50	N	
LOCUST	WA4LBT	448.70	443.70	*	PAL
MAYODAN	WA4ACP	447.10	442.10	N	
MT AIRY/FSH PK	KF4UY	449.80	444.80	*	LRB
MT MITCHELL	N4DWU	448.60	443.60	*	
NEW BERN	WA4VBC	449.90	444.90	*	O
RALEIGH	N4BEA	447.15	442.15	*	L
RALEIGH	WA4PEN	449.50	444.50	*	PAL
RALEIGH	WA1WXL	449.95	444.95	*	
ROARING GAP	KC4XE	448.55	443.55	*	L
ROCKY MOUNT	N4JEH	449.70	444.70	*	PA
SALISBURY	KJ4HF	449.65	444.65	N	ARB
SAURATOWN MT	WA4HUV	439.25	421.25	N	V
SAURATOWN MT	N4GGC	448.10	443.10	N	L
SAURATOWN MT	WA4WTB	448.40	443.40	*	C
SELMA	KK4YP	449.00	444.00	N	C
SHELBY	W4NYR	439.25	427.25	*	V
SMITHFIELD	WK2F	449.25	444.25	N	
WILMINGTON	K4YNY	447.500	442.500	*	ALRB
WILMINGTON	K4GMP	449.85	444.85	*	
WILSON	NE4J	449.90	444.90	N	

SOUTH CAROLINA REPEATERS

10 METERS

RKY RDG/WALLACE	KA4ABW	29.60	RMT.BS	N	RB

6 METERS

PICKENS	WB4YXY	52.41	53.41	N	

2 METERS

AIKEN	W4TUN	144.57	145.17	*	
AIKEN	N4ADM	147.885	147.285	N	PA
ANDERSON	N4SZ	146.37	146.97	*	PA
ANDERSON/SAS MT	W4FVV	146.19	146.79	*	
BAMBERG	WA4DFP	144.73	145.33	N	
BARNWELL	WA4FOF	147.63	147.03	*	
BIG KNOB/GREY CT	KB4YF	146.265	146.865	N	
CHARLESTON	WB4URP	144.65	145.25	N	
CHARLESTON	K4ILT	146.16	146.76	N	PA
CHARLESTON	K4ILT	146.19	146.79	N	
CHARLESTON	WB4LET	147.87	147.27	*	PAL
CHELSEA	KB4GY	144.71	145.31	*	
CHERAW	KA4ABW	147.735	147.135	N	AEA
CHESTER	KB4FJX	146.025	146.625	N	T
COLUMBIA	KC4LB	144.83	145.43	N	PA
COLUMBIA	WB4NEP	146.115	146.715	N	PA
COLUMBIA	K4AVU	146.28	146.88	N	
COLUMBIA	N4NUY	147.93	147.33	N	
COLUMBIA	N4EOY	147.96	147.36	*	L
CONWAY	WD4JMT	144.51	145.11	*	
DILLON/PEE DEE	NN4N	146.145	146.745	*	
DORCHESTER	W4NAT	147.78	147.18	*	
FLORENCE	W4ULH	146.25	146.85	N	A
FLORENCE	WA4ISM	146.37	146.97	*	PA
FT MILL/CAROWND	AA4SC	147.78	147.18	*	
GASTON	WB4NEP	144.61	145.21	N	PA
GEORGETOWN	WD4DMI	147.975	147.375	N	
GREENVILLE	W4IQQ	146.34	146.94	*	
GREENVILLE	K4LEO	147.975	147.375	*	T
GREENWOOD	K4VIA	147.765	147.165	*	PA
GREENWOOD/HODGES	KB4CS	144.53	145.13	N	
GRNVLE/CSRS HD	W4NYK	146.01	146.61	*	
GRNVLE/PARIS MT	W4NYK	146.22	146.82	*	PA
HILTON HEAD	N1BAL	147.84	147.24	*	
INMAN	WD8OXE	144.55	145.15	*	PA
LANCASTER	W4PAX	146.10	146.70	*	
LANCASTER	KC4AC	147.84	147.24	*	
LEXINGTON	KA4FEC	147.99	147.39	*	
LITTLE MT	K4AVU	147.81	147.21	N	
MARION	W4YLT	146.40	147.00	N	EA
MONCKS CORNER	KA4BJM	147.75	147.15	N	
MT PLEASANT	K4ESG	146.385	146.985	N	PA
MT. PLEASANT	K4LWS	147.90	147.30	N	PAT
MYRTLE BEACH	WA4DDK	144.87	145.47	N	T
MYRTLE BEACH	WD4JMT	147.72	147.12	*	EA
MYT BEA/BRKSVLLE	W4DCD	147.885	147.285	N	AL
N. AUGUSTA	K4FKJ	146.13	146.73	*	
N. MYRTLE BEACH	K4HOG	147.63	147.03	N	PA
N. SPARTANBURG	N4UZT	147.915	147.315	*	A
NEWBERRY	KB4CO	146.085	146.685	N	
ORANGEBURG	K4RDN	147.69	147.09	N	C
PICKENS	WB4YXZ	146.40	147.00	N	
RKY RDG/WALLACE	KA4ABW	144.89	145.49	N	A
ROCK HILL	AA4PF	144.71	145.31	*	PAL
ROCK HILL	K4YTZ	146.43	147.03	N	PA
ROCKY SPUR	WD4MGM	147.885	147.285	*	
SANTEE	W4DTW	147.825	147.225	N	A
SENECA/LONG MT	WA4JRJ	147.87	147.27	N	PA
SIMPSONVILLE	WD4BJY	146.13	146.73	*	
SIMPSONVILLE	WA4SDT	147.75	147.15	N	R
SPARTANBURG	K4JLA	147.69	147.09	N	
ST. MATTHEWS	AD4U	146.07	146.67	*	A
SUMMERTON	N4LWY	144.55	145.15	N	PA
SUMTER	KB4FIQ	146.04	146.64	N	
SUMTER	WA4UMU	147.615	147.015	N	EA
SUMTER/SHAW	W4VFR	147.86	147.06	*	A
WHITE HALL	W4BWZ	146.31	146.91	N	

220 MHZ

AIKEN	W4TUN	223.36	224.96	*	
COLUMBIA	N4EOY	223.30	224.90	*	LRB
CROSS	KB4VFD	222.98	224.58	*	CA
GREER	W4ILY	222.38	223.98	N	PA
LITTLE MT	KA4FEC	222.52	224.12	*	
PARIS MT/GRNVL	W4NYK	223.32	224.92	N	C
PICKENS	WB4QHF	222.80	224.40	*	PA
PICKENS/CSRS HD	WB4QHF	222.54	224.14	*	LRB
PICKENS/SASFR MT	AJ4N	222.46	224.06	*	
RIDGEVILLE	N4CII	222.48	224.08	*	

440 MHZ

AIKEN	W4TUN	448.40	443.40	*	
ANDERSON/SAS MT	WD4BUH	449.925	444.925	N	
CAESARS HEAD	WB4LZQ	448.875	443.875	N	
CHARLESTON	N4MNH	449.30	444.30	*	A
COLUMBIA	N4EOY	448.00	443.00	*	LRB
COLUMBIA	K4NHN	449.20	444.20	N	
CROSS	KB4VFD	447.30	442.30	*	CA
GREENVILLE	KJ4IS	447.25	442.25	N	C
GRNVLE/PARIS MT	ND4N	448.10	443.10	*	PA
LEXINGTON	N4GUP	439.25	421.25	*	V
MT PLEASANT	N4DRU	449.70	444.70	N	
PICKENS/CSRS HD	WB4QHF	447.40	442.40	*	
SUMMERVILLE	WA4HNK	448.80	443.80	*	PA
SUMTER	WA4UMU	439.25	423.25	N	V

TENNESSEE REPEATERS

10 METERS

JACKSON	NQ4W	29.54	29.64	*	C
KNXVL/ENG MT	WB4IOB	29.52	29.62	N	
MEM/FISHERVILLE	N4DRL	29.58	29.68	*	AL
MEMPHIS/FRAYSER	W4ZJM	29.52	29.62	N	
NASHVILLE	WA4BZU	29.54	29.64	*	TLO
UNION CITY	WA4YGM	29.56	29.66	N	

6 METERS

CHATTANOOGA	WB4LRD	52.01	53.01	N	
COOKEVILLE	WA4UCE	52.13	53.19	N	
GALLATIN	WD4KWP	52.45	53.45	*	L
GREENEVILLE	K4LSP	52.01	53.01	N	
GUTHRIE (TN/KY)	KA4ZKL	52.23	53.23	N	
KNOXVILLE	WA4YON	52.25	53.25	N	
KNOXVILLE	WB4GBI	52.35	53.35	*	O
KNXVL/ENG MT	WB4IOB	52.15	53.15	N	A
MEM/FISHERVILLE	N4DRL	52.27	53.27	*	AL
MEMPHIS	WA4KOG	52.01	53.01	*	
MEMPHIS	K4RDK	52.55	53.55	N	
NASHVILLE	N4ARK	52.525	52.525	*	RB

2 METERS

ALAMO	WB4EDS	147.735	147.135	N	
ATHENS	WB4GRC	144.71	145.31	N	
BENTON	K4SIR	144.85	145.45	N	T
BLOUNTVILLE	WA4KMG	147.60	147.00	N	
BRISTOL	WB4DKI	146.07	146.67	*	A
BRISTOL	WD4CYZ	146.28	146.88	N	
BRISTOL/HLSTN MT	K4LSP	146.16	146.76	N	A
BROWNSVILLE	KB4YTU	144.83	145.43	N	PAL
BROWNSVILLE	WA4ABU	146.055	146.655	N	
BROWNSVILLE	KB4YTU	146.16	146.76	N	PAL
CARTHAGE	N4OTT	144.59	145.19	*	PA
CHATT/SIGNAL MT	AD4F	146.055	146.655	*	
CHATT/SIGNAL MT	WA4ZOK	147.60	147.00	N	PA
CHATTANOOGA	K4CMY	144.53	145.13	N	
CHATTANOOGA	K4VCM	144.89	145.29	N	
CHATTANOOGA	W4AM	144.79	145.39	N	A
CHATTANOOGA	K4CMY	146.01	146.61	N	
CHATTANOOGA	W4AM	146.19	146.79	N	A
CLARKSVILLE	WD4SGA	147.60	147.00	N	
CLARKSVILLE	AA4TA	147.99	147.39	*	
CLEVELAND	W4GZX	146.31	146.91	N	C

MORE TENNESSEE REPEATERS

COALFIELD	AA4UP	146.145	146.745	*	
COLLIERVILLE	KB4YGI	144.53	145.13	N	
COLUMBIA	KE4KO	144.85	145.45	N	
COLUMBIA	WA4ZYX	147.72	147.12	*	A
COOKEVILLE	NQ4Y	144.51	145.11	N	
COOKEVILLE	WA4UCE	144.83	145.43	N	A
COOKEVILLE	K4HKZ	147.645	147.045	N	C
COOKEVILLE	N4WS	147.81	147.21	*	PA
COVINGTON	WA4VXW	147.93	147.33	N	PALK
CROSSVILLE	KE4RX	146.04	146.64	*	
CROSSVILLE	W4CV	147.93	147.33	N	
CUMBERLAND CITY	WD4DBJ	144.73	145.33	*	
DAYTON/RHEA CTY.	K4ZLA	147.99	147.39	N	
DECATUR-PONE KB	W4RJC	144.55	145.15	*	
DYERSBURG	AA4HF	146.145	146.745	N	
ERWIN	KC4DWQ	144.65	145.25	N	AL
FAYETTEVILLE	KO4G	146.265	146.865	N	
FAYETTEVILLE	W4NIQ	147.63	147.03	N	PA
GALLATIN	WD4BKY	147.84	147.24	N	L
GALLATIN	WD4BKY	147.87	147.27	N	
GERMANTOWN	KA4ATI	147.69	147.09	N	
GREENEVILLE	K4EPC	144.79	145.39	*	
GREENEVILLE	WB4TUO	144.81	145.41	N	
GTLBG/COVE MTN	WA4KJH	146.25	146.85	N	LEA
GUTHRIE (TN/KY)	KA4NNE	146.205	146.805	N	
HENDERSON	K4TC	147.705	147.105	N	PAEA
HENDERSONVILLE	WB4WZK	144.67	145.27	*	PAT
HENDERSONVILLE	N4WF	147.945	147.345	N	
HOLSTN MT/J.CITY	WB4SQC	144.69	145.29	*	PA
HOLSTON MT/BLOUN	WA4KMG	147.81	147.21	N	
HUMBOLDT	NQ4Y	144.75	145.35	N	AL
JACKSON	WB7BOX	144.51	145.11	*	AL
JACKSON	KF4SC	144.71	145.31	*	A
JACKSON	W4WKZ	147.81	147.21	*	A
JASPER	KD4XX	144.59	145.19	N	A
JOHNSON CITY	W4ABR	146.19	146.79	N	A
JOHNSON CITY	KE4FH	147.87	147.27	N	A
KNGSPT/BAYS MT	W4TRC	146.37	146.97	N	PA
KNOXVILLE	N4IJL	144.51	145.11	N	
KNOXVILLE	W4BBB	144.61	145.21	*	A
KNOXVILLE	WA4TEM	144.73	145.33	*	ARB
KNOXVILLE	N4GRC	144.77	145.37	*	
KNOXVILLE	N4IUA	144.83	145.43	N	
KNOXVILLE	WB4GBI	144.87	145.47	*	
KNOXVILLE	WB4GBI	146.025	146.625	*	
KNOXVILLE	WB4GBI	146.34	146.94	*	
KNOXVILLE	KA4AZQ	146.40	147.00	*	
KNOXVILLE	WB4GBI	147.675	147.075	*	A
KNOXVILLE	W4BBB	147.90	147.30	*	
KNXVL/CROSS MT	KA4OAK	147.96	147.36	N	
KNXVL/ENG MT	WB4IOB	146.13	146.73	N	
LAFAYETTE	KC4ECD	144.71	145.31	*	EAT
LAFOLLETTE	KA4OAK	144.53	145.13	N	A
LAFOLLETTE/WMT	K4BGW	146.07	146.67	N	
LAKE CITY	WB4OAH	146.22	146.82	N	
LAVERNE	KJ4RA	144.63	145.23	N	
LEBANON	WB4DOR	144.79	145.39	*	
LEBANON	WD4JVV	147.615	147.015	N	
LENOIR CITY	KB4PIO	146.085	146.685	N	PA
LEXINGTON	WD4MVR	146.43	147.03	N	
LOUDON	KE4SK	144.57	145.17	*	
MANCHESTER	W4UOT	146.10	146.70	*	PA
MARTIN	WA4ZQX	146.025	146.625	*	A
MCMINNVILLE	WD4MWQ	146.37	146.97	*	PA
MCMINVL/SHT MT	W4KKO	144.89	145.49	*	
MEDINA	K4BEZ	146.37	146.97	N	A
MEM/FISHERVILLE	N4DRL	144.73	145.33	*	AL
MEMPHIS	K0JXI	144.55	145.15	N	
MEMPHIS	KA0BRN	144.57	145.17	N	ALT
MEMPHIS	WA4VIP	144.81	145.41	N	
MEMPHIS	K4HAZ	144.85	145.45	N	O
MEMPHIS	WA4KOG	144.85	145.45	*	P
MEMPHIS	WA4KOG	144.89	145.49	*	
MEMPHIS	WB4NNE	146.04	146.64	N	O
MEMPHIS	W4UFT	146.10	146.70	N	
MEMPHIS	WB4DAZ	146.13	146.73	*	PA
MEMPHIS	WA4HBY	146.19	147.51	N	NB
MEMPHIS	W4BS	146.22	146.82	N	PA
MEMPHIS	WA4KOG	146.25	146.85	*	A
MEMPHIS	WA4ETE	146.28	146.88	*	A
MEMPHIS	K4BN	146.34	146.94	N	A
MEMPHIS	K4FZJ	146.40	147.00	N	
MEMPHIS	W4ZJM	146.43	147.03	N	L
MEMPHIS	WA4MQQ	147.66	147.06	N	
MEMPHIS	KA4GMV	147.72	147.12	N	AT
MEMPHIS	WA4KOG	147.78	147.18	*	
MEMPHIS	WA4OWI	147.87	147.27	N	
MEMPHIS	WA4ADT	147.90	147.30	*	PAL
MEMPHIS	WB4MMI	147.96	147.36	N	TA
MILLINGTON	W4ODR	146.43	147.03	N	L
MORRISTOWN	WD4PRQ	147.63	147.03	N	EA
MORRISTOWN	WB4OAH	147.825	147.225	N	
MOUNTAIN CITY	WD4OMO	144.87	145.47	N	
MURFREESBORO	WB4LHO	144.57	145.17	N	PA
NASHVILLE	N4ARK	144.61	145.21	*	RBL
NASHVILLE	K4UVH	144.69	145.29	N	
NASHVILLE	KI4OG	144.77	145.37	*	PA
NASHVILLE	N4ARK	144.87	145.47	*	PA
NASHVILLE	WA4PCD	146.01	146.61	N	PAO
NASHVILLE	WB4NTM	146.04	146.64	*	AT
NASHVILLE	W4PQP	146.16	146.76	N	
NASHVILLE	W4SQE	146.19	146.79	*	
NASHVILLE	WA4PCD	146.25	146.85	N	PA
NASHVILLE	WA4TOA	146.28	146.88	N	
NASHVILLE	WA4PCD	146.34	146.94	N	
NASHVILLE	K4AYN	147.645	147.045	N	
NASHVILLE	WA4PCD	147.75	147.15	N	
NASHVILLE	WA4PCD	147.78	147.18	N	
NASHVILLE	WA4BZU	147.885	147.255	*	TPA
NASHVILLE	WB4ZSA	147.90	147.30	*	PA
NASHVILLE S	WB4NTM	147.96	147.36	*	ATL
NASHVILLE S.W.	WB4NTM	146.07	146.67	*	ATL
NASHVLE/FAIRVIEW	N4ARK	144.51	145.11	*	
OAK RIDGE	W4SKH	146.28	146.88	N	
OAK RIDGE	W4SKH	146.37	146.97	N	A
OAK RIDGE	K4EAJ	147.72	147.12	*	
OAK RIDGE	K4EAJ	147.75	147.15	*	LT
PARIS	K4KLX	147.96	147.36	N	A
PETROS/FRZ HD MTK	J4SI	147.855	147.255	*	AEAR
PIKEVILLE	K4PUX	147.885	147.285	N	
PINSON	WB0TMC	147.87	147.27	N	C
POCAHONTAS	WB4MMI	147.96	147.36	N	
POLK CTY/OSWALD	WD4DES	147.78	147.18	N	A
PULASKI/MUSIC MT.	W4JVO	146.175	146.775	N	EA
PURYEAR	WA4CEX	147.765	147.165	*	
RAMER	KF4VM	144.79	145.39	N	EA
ROCKWOOD	AA4KS	147.615	147.015	*	AEA
SAVANNAH	WB4DQU	146.31	146.91	N	
SEV/SHIELDS MT	N4CJX	144.67	145.27	N	
SHELBYVILLE	W4QEB	147.66	147.06	*	A
SHORT MTN	W4YXA	146.31	146.91	*	
SPARTA/BON AIR	W4BSA	147.69	147.09	N	A
SPRING HILL	NW4E	144.85	145.45	N	A
SULPHUR SPRINGS	KC4DWQ	147.99	147.39	N	AL
TRENTON	WB5LIY	144.61	145.21	N	A EA
UNION CITY	WA4YGM	146.10	146.70	N	A
UNION CITY	WA4YGM	147.615	147.015	N	ARB
WATERTOWN	KE4WA	146.13	146.73	N	T
WAVERLY	NO4Q	146.085	146.685	N	
WINCHESTER	N4NCM	146.22	146.82	*	PA

220 MHZ

BLOUNTVILLE	WA4KMG	222.60	224.20	N	
BROWNSVILLE	KB4YTU	222.60	224.20	N	PAL
CHATT/SIGNAL MT	WA4ZOK	223.30	224.90	N	
CHATTANOOGA	WD4MQG	223.04	224.64	N	PA
CHATTANOOGA	K4VCM	223.18	224.78	N	A
CLARKSVILLE	KF4GP	222.34	223.94	N	
CLEVELAND	KK4US	222.72	224.32	N	
CLEVELAND	KK4US	222.72	224.32	N	C
COLLIERVILLE	KB4YGI	222.80	224.40	N	PAL
DONELSON	N4PYI	223.14	224.74	*	C
FISHERVILLE	N4DRL	223.28	224.88	*	AL
FRANKLIN	WD4SGS	222.54	224.14	N	
GALLATIN	WB4ZSA	222.38	223.98	*	
GREENEVILLE	WB4NKM	220.058	220.058	*	BEAC
GREENEVILLE	WB4NKM	223.34	224.94	*	A
HERMITAGE	WB4RAB	222.30	223.90	N	
JC/BUFFALO MT	WA4UCI	223.18	224.78	*	
KNOXVILLE	KB4FZK	222.62	224.22	*	
KNOXVILLE	WA4YON	222.86	224.46	N	
KNOXVILLE	W4BBB	222.90	224.50	*	
MEM/FISHERVILLE	N4DRL	222.90	224.50	*	AL
MEMPHIS	W4BS	222.82	224.42	N	L
MEMPHIS	WA4KOG	223.18	224.78	*	
MEMPHS/FRAYSER	W4ZJM	222.34	223.94	N	L
NASHVILLE	WB4UEX	222.48	224.08	N	
NASHVILLE	KI4OG	222.84	224.44	*	PALR
NASHVILLE	KM4MC	223.06	224.66	N	AL
NASHVILLE	KI4OG	223.24	224.84	*	PALR
NASHVILLE	N4PYI	223.34	224.94	*	PA
SHORT MTN.	KE4NP	222.66	224.26	*	
SPRINGFIELD	KB8EHB	222.62	224.22	*	
SULPHUR SPRINGS	KC4DWQ	223.26	224.86	N	AL

440 MHZ

ALAMO	WB4EDS	448.75	443.75	N	L
BARTLETT	WA4PAJ	449.25	444.25	N	
BENTON/BEAN MT	K4SIR	449.95	444.95	N	T
BRISTOL/HLST MT	K4LSP	449.50	444.50	N	A
BROWNSVILLE	KB4YTU	449.20	444.20	N	PAL
BROWNSVILLE	KB4YTU	449.45	444.45	N	CPAL
CHATTANOOGA	WJ9J	447.15	442.15	N	AEAL
CHATTANOOGA	NJ5R	447.325	442.325	N	
CHATTANOOGA	W4AM	449.10	444.10	N	A
CHATTANOOGA	WJ9J	449.425	444.425	N	AEAL
CHATTANOOGA	WB4LRD	449.875	444.875	N	
CLARKSVILLE	KF4GP	449.95	444.95	N	
CUMBERLAND CITY	WD4DBJ	448.40	443.40	*	PAT
FAYETTEVILLE	KC4GPM	448.10	443.10	*	
FISHERVILLE	N4DRL	449.30	444.30	*	AL
FRANKLIN	N4ULM	448.85	443.85	N	
GALLATIN	WD4BKY	449.35	444.35	N	PALT
GALLATIN	WD4KWP	449.45	444.45	*	
GATLBG/COVE MT	WA4KJH	448.30	443.30	N	L
GRAY/HOLSTON MT	WD4SBX	447.20	442.20	*	A
GRAY/HOLSTON MT	WD4SBX	449.55	444.55	*	A
GREENEVILLE	WB4NKM	449.65	444.65	*	RB
HENDERSON	K4TC	449.75	444.75	N	PA
J.CITY/HOLSTN MT	WB4SQC	448.425	443.425	*	
JACKSON	WB4EPG	447.80	442.80	N	A
JACKSON	WB7BOX	449.875	444.875	*	PAEA
JAMESTOWN	N4PTK	448.625	443.625	*	
JASPER	KD4XV	447.05	442.05	N	
KNOXVILLE	WA4NTZ	447.50	442.50	N	
KNOXVILLE	WB4GBI	449.30	444.30	*	
KNOXVILLE	KB4KSL	449.50	444.50	N	
KNOXVILLE	KB4NK	449.60	444.60	*	
MEDINA	K4BEZ	447.05	442.05	N	AL
MEMPHIS	N4ERU	421.25	439.25	N	V
MEMPHIS	N4ERU	439.25	421.25	N	ATV
MEMPHIS	KB4LJV	441.60	441.60	N	L
MEMPHIS	WB4EPG	447.625	442.825	N	
MEMPHIS	WF4G	447.825	442.825	N	
MEMPHIS	W4ZJM	448.00	443.00	N	
MEMPHIS	KA4IZF	448.10	443.10	N	TCP
MEMPHIS	WA4QWW	448.40	443.40	N	A
MEMPHIS	KA5RYF	448.95	443.95	N	
MEMPHIS	KA0BRN	448.975	443.975	N	ALT
MEMPHIS	WA4ADT	449.00	444.00	*	T
MEMPHIS	K4RDK	449.025	444.025	N	
MEMPHIS	KA4JXT	449.10	444.10	N	PARB
MEMPHIS	WA4KOG	449.40	444.40	*	
MEMPHIS	KA4IZF	449.50	444.50	N	A
MEMPHIS	K0JXI	449.60	444.60	N	
MEMPHIS	K0JXI	449.80	444.80	N	
MEMPHIS	WB4MMI	449.90	444.90	N	TAL
MEMPHIS	WB4NNE	449.95	444.95	N	O
MILAN	WD4ABJ	447.10	442.10	*	
MORRISTOWN	KA4NEX	449.20	444.20	N	
MORRISTOWN	KD4LP	449.80	444.80	*	A
MT JULIET	WB4PUB	448.05	443.05	*	PA
NASHVILLE	KJ4ZQ	439.25	421.25	N	V
NASHVILLE	KI4OG	449.05	444.05	*	PAT
NASHVILLE	WB4NTM	449.15	444.15	*	ATL
NASHVILLE	KI4OG	449.575	444.575	*	
NASHVILLE	W4AY	449.675	444.675	N	
OAK RIDGE	K4EAJ	449.40	444.40	*	L
OAKFIELD	WA4BJY	447.20	442.20	*	PATL
PARIS/GROVE HL	WA4WKS	448.50	443.50	N	
PULASKI	KB4TPI	439.250	421.250	N	V
PULASKI	KB4TPI	447.150	442.150	N	
ROCKWOOD	KB4NEI	449.00	444.00	*	

1270 MHZ

NASHVILLE	N4MEY	1277.25	1439.25	N	VL

VIRGINIA REPEATERS

(Listing updates for some repeaters courtesy of T-MARC)

10 METERS

CHARLOTTESVILLE	WA4TFZ	29.60	29.60	*	RB
NEWPORT NEWS	WB4CTF	29.60	29.60	*	RB
ONEIDA PK/BLFLD	WZ8E	29.58	29.68	*	RBL
ROANOKE/POOR MT	WB8BON	29.54	29.64	N	CL
STERLING	KD4DN	29.58	29.68		M

6 METERS

ALEXANDRIA	WA4CCF	52.13	53.13	N	ML
BEDFORD/THAX MT	WB4DBB	52.15	53.15	*	
CENTERVILLE	KA4DCS	52.58	52.48		M
CHARLOTTESVILLE	WA4TFZ	52.525	52.525	*	RB
DANVILLE(DCC)	WB4GJG	52.13	53.13	*	
HERNDON	WD4KHP	52.62	52.82		TM
LEXNGTN/ROCK MT	WA4DUM	52.01	53.01	N	L
LOUISA	KA4NNN	52.07	53.07	N	
RICHMOND	WB4FAX	52.43	53.43	*	A
RIDGEWAY	AA4QT	52.25	53.25	N	
ROANOKE	WB4DBB	52.25	53.25	*	L
ROANOKE/POOR MT	WB8BON	52.09	53.09	N	CL
VIRGINIA BEACH	WD8DAS	52.19	53.19	N	

2 METERS

ABINGDN/BRMLY MTK	4LSP	146.01	146.61	N	L
ABINGDON	N4AKZ	146.34	146.94	N	A
ACCOMAC	WA4TVS	147.855	147.255	*	EA
ALEXANDRIA	WB4MJF	144.55	145.15		M
ALEXANDRIA	N4FSC	144.71	145.31		MPA
ALEXANDRIA	WD4PDP	146.055	146.655		MPA
ALEXANDRIA	W4HFH	147.915	147.315		ML
ALTAVISTA	WA4ISI	146.055	146.655	*	AL
ARLINGTON	N4EFJ	144.87	145.47		M
BARREN SPRINGS	K4HZS	146.07	146.67	*	
BEDFD/APL ORCH	WB4DBB	144.63	145.23	*	
BEDFORD	WB4JBJ	147.705	147.105	N	PAL
BLACKSBURG	AB9I	146.115	146.715	*	
BLAND	N4AZJ	144.75	145.35	*	PARB
BLUEFIELD	W8MOP	144.89	145.49	*	PA
BRISTOL	WD4CYZ	146.28	146.88	N	
CHARLOTTESVILLE	WA4TFZ	146.16	146.76	*	
CHARLOTTESVILLE	WA4TFZ	146.325	146.925	*	
CHASE CITY	W4AXH	146.31	146.91	*	
CHESAPEAKE	K4NDH	144.69	145.29	N	EA
CHESAPEAKE	N4GSP	146.01	146.61	*	AEA
CHESAPEAKE	N4SD	146.19	146.79	*	AEA
CHESTERFIELD	KA4CBB	147.96	147.36	*	
CHESTERFLD CO	WA4ECM	147.66	147.06	*	A
COVINGTON	WA4HTI	146.205	146.805	*	L
CULPEPER	N4FAF	147.72	147.12		M
DANTE	WD4CYZ	147.855	147.255	N	
DANVILLE(DCC)	WB4GJG	146.325	146.925	*	AEA
DANVILLE/WHT OAK	K4WQS	146.10	146.70	*	PA
FAIRFAX	WA4YVM	144.57	145.17		M
FAIRFAX	W4LBL	146.19	146.79		MPA
FALLS CHURCH	W4AQD	144.75	145.35		MT
FARMVILLE	WA4QQI	144.73	145.33	*	
FINCASTLE	W4WIC	146.04	146.64	*	L
FRANKLIN	K4SPS	147.90	147.30	*	PAEA
FREDRICKSBURG	WB4LNT	147.615	147.015		M
GALAX/BRIRP MT	N4VL	147.69	147.09	*	A
GALAX/LKOUT MT	N4VL	144.53	145.13	*	RB
GATE CITY	N4WWB	146.22	146.82	N	
GLADYS	N4SJM	147.945	147.345	N	PARB
GLOUCESTER	NB4P	144.77	145.37	*	EA

MORE VIRGINIA REPEATERS

GRUNDY	K4HWQ	147.92	147.32	N	ANB
GRUNDY/BIG A MT	WD4DCX	146.235	146.835	N	L
GUM SPRING	WB4IKL	147.87	147.27	*	
HAMPTON	K4DHO	146.13	146.73	*	PA
HAMPTON	K4UMI	146.34	146.94	N	T
HARRISONBURG	WX4C	147.825	147.225		AM
JEWELL RIDGE	WB4QJZ	147.75	147.15	N	
KILMARNOCK	W2MS	144.61	145.21	*	A
LEESVILLE	N4UTN	146.235	146.835	N	PA
LEXINGTON	KI4ZR	146.07	146.67	*	RB
LEXINGTON	KI4ZR	147.90	147.30	*	A
LEXNGTN/ROCK MT	WA4DUM	147.93	147.33	N	
LUNENBURG CT	HSEAA4OG	147.84	147.24	*	
LYNCHBURG	W4WWQ	146.01	146.61	N	
LYNCHBURG	AB4M	146.415	147.015	*	PA
LYNCHBURG	WA4RTS	147.795	147.195	*	
LYNCHBURG	KB4ILD	147.975	147.375	N	PA
MADISON	N4AJO	147.99	147.39	M	M
MANASSAS	WA4FPM	146.37	146.97		MPA
MARION	KC4IH	146.04	146.64	N	A
MARTINSVILLE	AB4L	147.885	147.285	*	
MCLEAN	WD4IWG	147.81	147.21		MR
MIDDLEBROOK	W4WRN	146.37	146.97	N	EA
MOUNTAIN LAKE	WZ8E	147.465	146.865	*	PAL
MT.LAKE/BALD KNB	K4TUE	146.31	146.91	N	
NEW MARKET	KA4VW	146.025	146.625		M
NEWPORT NEWS	KB4ORI	144.63	145.23	*	AEAC
NEWPORT NEWS	WA4OHX	144.89	145.49	*	AT
NEWPORT NEWS	WB4CTF	147.765	147.165	*	PALR
NORFOLK	WA4ZUA	144.57	145.17	*	EARB
NORFOLK	NE4D	146.10	146.70	*	EA
NORTON/HIGH KNOB	K4AXO	146.415	147.015	N	L
ONEIDA PEAK/BLF	WZ8E	146.355	146.955	*	PAL
PEARISBURG	N4AZJ	147.735	147.135	*	
PENNINGTON GAP	N4LQC	146.10	146.70	N	
PETERSBURG	K4ARO	144.55	145.15	*	
PETERSBURG	K4ARO	147.99	147.39	*	
PKS KB/PULASKI	KT4Z	147.78	147.18	*	PA
PORTSMOUTH	W4POX	146.25	146.85	*	AEA
RICHMOND	K4YPE	144.51	145.11	*	A
RICHMOND	WB4FAX	144.59	145.19	*	A
RICHMOND	W4SQT	144.83	145.43	*	PA
RICHMOND	WB4QEY	146.04	146.64	N	PA
RICHMOND	WA4ZBE	146.28	146.88	*	PA
RICHMOND	W4ZA	146.34	146.94	*	
RICHMOND	WA4JST	146.43	147.03	N	
RICHMOND	N4HB	147.735	147.135	*	T
ROANOKE	N4AP	146.34	146.94	N	A
ROANOKE/POOR MTK	C4DY	146.145	146.745	*	PA
ROANOKE/POOR MTW	4CA	146.385	146.985	*	PAL
ROANOKE/POOR MT.	WB4QOJ	144.61	145.21	N	RVKL
SALEM	W4PDL	146.28	146.88	*	
STAFFORD	NM7J	144.67	145.27		M
STANARDSVILLE	N4RAG	146.295	146.895	*	AEA
STAUNTON	W4XD	146.10	146.70	*	
STAUNTON	WA4ZBP	146.25	146.85	*	RBR
STAUNTON/EL. KB	N4RAG	147.645	147.045	*	
STERLING	WA4TXE	146.115	146.715		M
STUARTS DRAFT	KB4OLM	147.96	147.36	N	
SUFFOLK/GASBURG	WA4HMT	146.40	147.00	*	PAEA
TYSONS CORNER	WD4HLF	146.31	146.91		MPA
VIENNA	K4HTA	146.085	146.685		M
VIRGINIA BEACH	WA4KXV	146.295	146.895	*	
VIRGINIA BEACH	WA4KXV	146.37	146.97	*	EA
VIRGINIA BEACH	WA4SBC	147.645	147.045	N	
VIRGINIA BEACH	W4NV	147.975	147.375	N	
VOLENS	WD4LBM	146.46	147.06	*	PA
WARRENTON	WB4FJT	147.765	147.165		M
WARSAW	KA4ZIP	147.93	147.33	*	EA
WAYNESBORO	W4BLD	147.63	147.03	*	O
WAYNSBR/BEAR DEN	W4PNT	147.675	147.075	*	PAEA
WILLIAMSBURG	W4NTG	146.07	146.67	*	
WILLIAMSBURG	KB4ZIN	146.16	146.76	*	A
WINCH/BLUEMONT	WA4TSC	147.90	147.30		M
WINCHESTER	W4RKC	146.22	146.82	*	MEA
WOODBRIDGE	WB4FQR	147.84	147.24		MA
WYTHEVILLE	WD4MUQ	146.175	146.775	*	AL
WYTHEVL/SAND MT	KC4VR	144.67	145.27	*	
YORKTOWN	WD4SDC	147.825	147.225	N	PAT

220 MHZ

ALEXANDRIA	WA4CCF	223.22	224.82		ML
ARLINGTON	KI4MB	222.46	224.06		M
BEDFD/APL ORCH	WB4DBB	223.94	222.34	N	RBL
BEDFORD	N4PLV	223.24	224.84	*	C
CHARLOTTESVILLE	WA4TFZ	223.50	223.50	*	RB
DANVILLE	WB4GJG	222.78	224.38	*	
DANVLE/WHITE OAK	N4GLA	223.18	224.76	*	
DELTAVILLE	AA4HQ	222.40	224.00	*	EA
FAIRFAX	WB4YHD	222.50	224.10		ML
FAIRFAX	WD4KHP	222.82	224.42		PALT
FALLS CHURCH	N4CHP	223.38	224.98	M	MPA
GASBURG/LK GAST	NWA4HMT	223.00	224.60	*	
GLOUCESTER	NB4P	223.02	224.62	*	
HAMPDEN-SYDNEY	WB4PEA	222.60	224.20	*	
HAMPTON	KB4UHA	223.26	224.86	*	AEAR
LEESBURG	WA4TXE	222.42	224.02		M
LOVETTSVILLE	WB4FUJ	222.86	224.46		M
LYNCHBURG	AB4M	222.68	224.28	*	PA
MANASSAS	WA4FPM	223.06	224.66		M
MARTINSVILLE	WB4BVI	222.90	224.50	*	PA
NORTON/HIGH KB	WA4NDQ	222.82	224.42	*	
PETERSBURG	K4ARO	223.10	224.70	*	
ROANOKE	WB4DBB	222.50	224.10	*	L
ROANOKE/POOR MT	NWB4DBB	223.34	224.94	*	
STERLING PARK	WD4KHP	222.12	223.72		M
STUARTS DRAFT	KB4OLM	223.36	224.96	N	AL
TYSONS CORNER	WD4KHP	223.12	224.72		M
VIENNA	K4HTA	222.34	223.94		M
VIRGINIA BEACH	WD8DAS	222.58	224.18	N	
WOODBRIDGE	WB4GJZ	223.18	224.78		M

440 MHZ

ALEXANDRIA	WA9GVK	439.25	426.25		MV
ALEXANDRIA	WA4ZAI	449.50	444.50		M
ALEXANDRIA	W4HFH	449.60	444.60		M
ALTAVISTA	WA4ISI	449.425	444.425	*	AL
ARLINGTON	KA4DCS	444.875	449.875		M
ARLINGTON	KI4MB	449.15	444.15		M
BEDFD/APL ORCH	WB4DBB	449.35	444.35	*	L
BLUEFIELD	WZ8E	449.625	444.625	*	PAL
CHARLOTTESVILLE	WA4TFZ	449.25	444.25	*	
CHESAPEAKE	K4NDH	448.80	443.80	N	PA
CHESAPEAKE	N4EVG	448.90	443.90	*	PAEA
CHESTER/ENON	WA4ECM	449.20	444.20	*	RB
COVINGTON	WA4HTI	447.25	442.25	*	
FAIRFAX	KD4DN	443.725	448.725		ML
FALLS CHURCH	N4EFK	449.30	444.30		M
FALLS CHURCH	K8ZOA	449.45	444.45		ML
FOREST	WD4KQI	449.75	444.75	N	A
GALAX/PT LOOKOUT	N4VL	448.00	443.00	*	L
GASBURG	WA4HMT	447.00	442.00	*	
GREAT FALLS	N3AVA	449.05	444.05		M
HAMPTON	K4UMI	448.65	443.65	N	
HAMPTON	K4OGT	449.55	444.55	N	T
INDEPENDNCE HILL	AA4VA	448.80	443.80	N	M
INDEPENDNCE HILL	AA4VA	448.80	443.80		
LEXNGTN/ROCK MT.	WA4DUM	449.15	444.15	N	
LYNCHBG/JACK MT.	KF4YI	447.40	442.40	*	PA
LYNCHBURG	K4HEX	426.25	923.25	N	CV
LYNCHBURG	AB4FU	447.95	442.95	*	PA
LYNCHBURG	K4HEX	449.50	444.50	N	
MANASSAS	WD4JCE	444.225	449.225	M	ML
MARION	N4IQV	447.00	442.00	N	AL
NORFOLK	W4WIN	439.25	426.25	N	V
OILVILLE	KB4MIC	449.80	444.80	N	PA
PETERSBURG	K4ARO	449.40	444.40	*	T
PORTSMOUTH	KK4SN	449.00	444.00	*	AEA
RICHMOND	N4LFU	448.35	443.35	*	L
RICHMOND	K4ARO	449.65	444.65	*	
RICHMOND	K4ARO	449.85	444.85	*	
RIDGEWAY	AA4QT	449.90	444.90	N	
ROANOKE	WB4DBB	446.65	446.65	*	L
ROANOKE	KA4YUY	447.175	442.175	*	
ROANOKE/LONG RDG	WB8BON	449.925	444.925	N	
ROANOKE/POOR MT	W4CA	447.50	442.50	*	L
ROANOKE/POOR MT.	N4FHL	426.25	439.25	N	V
ROANOKE/POOR MT.	N4VG	447.70	442.70	*	
ROANOKE/POOR MT.	WB8BON	448.65	443.65	N	L
SPRINGFIELD	AA4VA	449.15	444.15	M	M
STAIMTPM/EL KNB	N4RAG	449.10	444.10	*	
STAUNTON	WA4ZBP	449.825	444.825	*	
STAUNTON	W4WRN	449.95	444.95	N	
STERLING	WA4TXE	447.20	442.20		M
STUART/SPOON MT	NKB4KQI	448.30	443.30	N	RB
STUARTS DRAFT	KB4OLM	449.05	444.05	N	
TYSONS CORNER	WB6GUS	448.50	443.50		M
TYSONS CORNER	K4JYF	449.75	444.75		M
VIENNA	K4HTA	448.25	443.25		M
VIRGINIA BEACH	WA4KXV	449.95	444.95	*	EA
WAYNESBORO	KA5NOJ	439.25	426.25	*	V
WAYNESBORO	WA4EZA	449.20	444.20	N	
WILLIAMSBURG	W4NTG	448.95	443.95	*	
WILLIAMSBURG	WB5LFS	449.10	444.10	*	T
WINCH/BLUEMONT	WA4TSC	444.925	449.925		M
WINCHESTER	NB3O	444.175	449.175		M
WINCHESTER	W3CSG	447.00	442.00		M
WINDY GAP MT	W4WIC	448.75	443.75	*	AL
WOODBRIDGE	KA4DCS	444.875	449.875		M
WOODBRIDGE	WB4FQR	449.90	444.90		M
WOODFORD	WA4SDE	443.975	448.975		M
WYTHEVILLE	KA4JRL	448.80	443.80	N	C
WYTHEVL/SAND MT	NKC4VR	449.325	444.325	*	AL

920 MHZ

ALEXANDRIA	WA4CCF	907.60	919.60		M

1270 MHZ

ALEXANDRIA	WA4CCF	270.60	282.60		M
VIENNA	WR4S	272.00	292.00		M

WEST VIRGINIA REPEATERS

(Listing updates for some repeaters courtesy of T-MARC)

10 METERS

BERKELEY SPRINGS	KK3L	29.52	29.62		M
PARSONS	KE8QC	29.55	29.65	*	TLC

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6 METERS

BOLT/BOLT MT	N8DKL	52.05	53.05	N	
ST ALBANS/COAL	WD8JKA	52.03	53.63	N	ATNB

2 METERS

ALDERSON	WA8AVZ	146.13	146.73	N	
BECKLEY/BOLT	N8FRV	144.57	145.17	*	AL
BECKLEY/EOC	N8FWL	144.77	145.37	*	LA
BECKLEY/FLAT TOP	K8BO	146.25	146.85	*	A
BECKLEY/LAYLAND	N8BZS	144.71	145.31	*	L
BLUEFIELD	W8MOP	144.89	145.49	*	PA
BRIDGEPORT	WB8DKM	147.72	147.12	*	PAT
BUCKHANNON	N8FHE	144.53	145.13	*	AL
BUCKHANNON	N8FHE	144.81	145.41	*	A
BUCKHANNON	WD8L	146.25	146.85	*	
CHARLES TOWN	N8EIV	146.385	146.985	M	MA
CHARLESTON	WD8OZT	144.75	145.35	N	
CHARLESTON	WS8L	144.83	145.43	*	PA
CHARLESTON	WB8IFS	146.22	146.82	N	A
CHARLESTON	KD8TC	147.81	147.21	N	
CLARKSBURG	N8FMD	146.085	146.685	*	L
CLARKSBURG	KE8MR	147.915	147.315	*	
CRAIGSVILLE	KD8OG	144.67	145.27	N	L
ELK GARDEN	N8FMD	146.145	146.745	*	
ELKINS	KB8BWZ	146.175	146.775	N	
FAIRMONT	W8SP	146.30	146.90	N	NB
FLAT TOP/WINTRPL	N8BZS	146.025	146.625	*	A
FRANKLIN	W3RUA	147.945	147.345	*	
GASSAWAY	WB8MZI	146.01	146.61	N	
GLENVILLE	KA8ZXP	144.69	145.29	*	EA
GRAFTON	WD8LNB	147.975	147.375	*	L
GRANTSVILLE	N8FXC	144.85	145.45	*	PA
HARRISVL/PENSBRO	WB8NSL	147.90	147.30	N	
HORSEPEN MT	NV8H	147.795	147.195	N	
HUNTINGTON	WB8FEQ	144.61	145.21	N	R
HUNTINGTON	W8VA	146.16	146.76	N	A
HUNTINGTON/CHAS	WB8EZR	146.04	146.64	*	EARB
KINGSTON/LICK KB	W8FG	144.87	145.47	N	
LEON	WB8NMT	147.78	147.18	N	
LIBERTY	W8HYX	144.81	145.41	*	
LOGAN/SUMERCO	NU8K	147.945	147.345	N	L
LOGAN/WARD RK MT	KJ8E	146.37	146.97	N	PAL
MARMET/BEE MT	K8HDB	144.55	145.15	N	
MARTINSBURG	WA8FSE	144.55	145.15	M	M
MARTINSBURG	WB8VAZ	147.855	147.255	M	M
MCMECHEN	WA8ULB	146.31	146.91	*	
MONTGOMERY	KD8VT	144.65	145.25	N	
MORGANTOWN	K8LG	144.83	145.43	N	AL
MORGANTOWN	W8CUL	146.16	146.76	*	PAL
MORGANTOWN	KE8QC	147.675	147.075	*	PAL
MT STORM	KA8JTH	147.705	147.105	N	AL
MULLINS/HRNDN MT	KC8IT	147.63	147.03	*	RB
NEW MARTINSVILLE	WB8CSW	147.54	146.94	N	NB
OAK HILL	W8OQC	146.19	146.79	*	EA
PARKERSBURG	WF8U	146.145	146.745	*	AEA
PARKERSBURG	WA8CRW	146.37	146.97	*	A
PARKERSBURG	WA8CRW	147.99	147.39	*	PA
PARSONS	KE8QC	144.73	145.33	*	ALRB
POINT PLEASANT	W8KNM	147.66	147.06	N	
PRINCETON	KA8PNC	146.46	147.06	*	A
PRINCETON	WB8NRK	147.825	147.225	*	A
PRINCETON/PIPEST	WD8OGY	146.325	146.925	N	A
RAVENSWOOD	WD8JNU	146.07	146.67	N	
RAVENSWOOD	WD8JNU	146.10	146.70	N	R
RICHWOOD	WB8YJJ	144.59	145.19	N	
SALT ROCK	WD8MCR	144.51	145.11	N	
SCOTT DEPOT/COAL	N8HP	147.87	147.27	*	PAEA
SHERRARD	KD8GL	146.115	146.715	*	EAPA
SO. CHARLESTON	WB8CQV	146.28	146.88	N	L
SPENCER	WT8T	147.705	147.105	N	
SPRUCE KNOB	N8HON	147.885	147.285	*	L
ST ALBANS	WB8GDY	146.40	147.00	*	
ST ALBANS	KA8SVR	147.75	147.15	*	PAEA
ST ALBANS	K8WMX	147.975	147.375	*	R
ST MARYS/BENS R	WB8ECC	147.63	147.03	N	L
SUMMERSVILLE	K8VKB	146.34	146.94	*	
TERRA ALTA	KD8ZR	147.60	147.00	*	AEA
UPPER TRACT	KB8BUC	146.055	146.655	*	
WEIRTON	KC8JN	146.34	146.94	N	A
WELCH	WB8SXZ	144.85	145.45	N	
WESTON	WD8EOM	144.79	145.39	N	PA
WHEELING	WB8JGY	144.59	145.19	N	PAL
WILLIAMSON	WR8M	144.73	145.33	*	ARB

220 MHZ

FLAT TOP/WINTRPL	N8BZS	222.46	224.06	*	A
KINGSTON/LICK KB	W8FG	223.14	224.74	N	
PARSONS	KE8QC	222.88	224.48	*	ALRB
WILLIAMSON	WR8M	222.54	224.14	*	

440 MHZ

BECKLEY	N8BZS	449.40	444.40	*	A
BECKLEY/KINGSTON	N8FRV	449.80	444.80	*	
BUCKHANNON	N8FHE	448.10	443.10	*	L
GRAFTON	WD8LNB	447.20	442.20	*	L
HUNTINGTON	WB8EZR	449.60	444.60	*	
JANE LEW	N8FMD	449.875	444.875	*	L
MORGANTOWN	K8LG	449.70	444.70	N	L
MORGANTOWN	W8CUL	449.80	444.80	N	PAL
MOUNDSVILLE	KY8O	439.25	421.25	N	V
MULLINS/HRNDN MT	KC8IT	449.00	444.00	*	LRB
PARSONS	KE8QC	449.65	444.65		ALRB
SO. CHARLESTON	WB8CQV	449.95	444.95	N	RBL
WHEELING	N8EKT	449.975	444/975	N	
WHEELING	N8EKT	449.975	444.975	N	

ICOM

IC-735 HF Transceiver With One Year Warranty!

ROCK SOLID

"The seven IC-735's used at P4OV performed well. Their excellent dynamic range contributed to our victory at P4OV. The IC-735 is a true champion!" Dale Green, VE7SV

ICOM
First in Communications

ICOM's IC-735 is the world's most popular HF transceiver for three simple reasons: **Performance, Size and Reliability.** With the highest performance, smallest size, and best customer satisfaction of any HF transceiver, the IC-735 is the undisputed champion for fixed, portable or mobile operations.

- **Field Proven 100W Transmitter** with 100% duty cycle. Proudly backed with ICOM's full one-year warranty.
- **105dB Dynamic Range Receiver** includes passband tuning, IF notch, adjustable noise blanker, and semi or full CW QSK.
- **Conveniently Designed.** Measures only 3.7"H by 9.5"W by 9"D. Great for mobiling or portable operation!
- **Optional AH-2 Automatic Tuning Mobile Antenna System** covers 3.5MHz-30MHz.
- **All HF Amateur Bands and Modes** transmits all U.S. HF amateur bands. General coverage receiver.
- **12 Tunable Memories** operate and reprogram like 12 separate VFO's. Supreme flexibility!

See Us For All The New Latest ICOM Equipment and Accessories!

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10:00 a.m. to 7:00 p.m. Daily. Closed Mondays.

ASHEVILLE'S
WCARS HAMFEST
JULY 28 & 29, 1990
FIREMAN'S TRAINING CENTER

Flea Market Spaces will be $2.00 per space per day plus Admission
Flea Market will start set-up at 6:30 a.m. Sat. and Sun. Morning
No one but Dealers allowed in building until 9:00 a.m.

Prizes given both Saturday 3:00 p.m. and Sunday 2:00 p.m.
Pre-Registration Prize: 220 Hand Held — Drawing 10:00 Saturday

Admission: Advance Tickets $4.00, At the Gate $5.00. Tickets good both days.
Send SASE and monies to: Harry Frick, KC4EZN
Deadline July 18
47 Grandview Rd.
Asheville, NC 28806

Dealers Tables are $6.00 per table per day plus the admission ticket, with some tables two (2) day reservations only.

Pre-Registration Prize — ICOM Handheld
Saturday Main Prize — 621 Dual Bander
Sunday Main Prize — 725 ICOM Mobile
Sunday Second Prize — 10 Meter Mobile
Sunday Third Prize — 2 Meter Antenna (You Select Mount)

Computerized Weather Station
Special drawing Sunday from extra prize tickets only.
(Must be present to win)

For further information contact: Willi KA4WPM or Maurice KB4YWN, 202 E. Oakview Rd., Asheville, NC 28806. Phone 704-253-0269.

WCARS/VEC Exams Saturday Only 9:00 A.M. Pre-Registration only by July 18th SASE necessary for Confirmation Notice. Fee $4.95. Bring Copy of License, Original License and 1 other form of ID. Send 610 Form and Fees to: Garland Lance NC4N, 854 Sandhill Rd., Asheville, NC 28806. Phone (Exam info only): 704-667-3758. Exam Site: Erwin Elementary School.

TALK-IN 146.91 and 146.76

Radio Amateur Club of Knoxville

presents the

24th Annual Knoxville Hamfest
and
Computer Fair

Saturday, June 2, 1990 9:00 A.M. to 5:00 P.M.

Knoxville Convention Center
World's Fair Park, Downtown, Knoxville, Tennessee

Bigger, Better, Newer, More Comfortable, More Convenient

Talk-in: 147.30+, 145.37-, 224.500

SPECIAL FEATURES

18,000 square feet of air conditioned exhibition and sales space

All-indoor hamfest and fleamarket A.R.R.L. Approved

Easy unloading with traditional help from RACK members

Rain or shine comfortable indoor fleamarket

Parking garage and covered walkways

Easy to find at the beautiful World's Fair Park

Lots of nearby lodging, restaurants, art gallery, historic sites

Tour the Great Smoky Mountains after the hamfest

PROGRAM FEATURES

All ICOM Door prizes--You need not be present to win the top 3 prizes
IC-735 XCVR w/ PS, IC-228-A 2M mobile rig, IC-2SAT handheld

VEC examinations on the hamfest site

FORUMS
Bob Grove, WA4PYQ, publisher of Monitoring Times, on spectrum monitoring
Joe Fairclough, WB2JKJ, and the kids of the JH22 Net

Breakfast, lunch, snacks, & drinks on site and nearby

Dealer Reservations:
Frank Ambrister, N4OQJ
P.O. Box 9605
Knoxville, Tennessee 37940
(615) 933-2539

VEC Examinations:
Ray Adams, N4BAQ
4325 Felty Drive
Knoxville, Tennessee 37918
(615) 687-5410

Good SWR on Your Mobile

Few people figure it, but extra low SWR on your mobile antenna will greatly improve your receiver and naturally allow you more power out.

It is amazing to check a weak signal with a 1.3:1 SWR, then check it again at 1.1:1 or less. The signal comes up considerably on most instances.

So if you are looking for maximum efficiency in your mobile installation, get yourself a good antenna, mount it as high and as clear as you can, and be sure you have the SWR as low as you can get it.

Quarterwave vs. Five-eighths?

Most hams will tell you a quarterwave antenna will work best in mountainous areas, where a five-eighths will work best in the flatlands. The reasons are simple. A quarterwave has a higher angle of radiation and will get over mountain peaks easier than a five-eighths.

The overall design of a five-eighths mobile antenna is for gain, which is obtained by lowering the angle of RF radiation the antenna is capable of doing. Visualize a donut on a saucer, with a pencil in the middle, sticking up. The donut shape represents a quarterwave antenna and how it radiates energy.

Now squash the donut about ½ its height. This represents the pattern of a ⅝-wave antenna. You see the height is lower, but the outer boundaries extend further.

Readers Didn't Like Separation of State

We kind of stirred up a hornet's nest when we split the Virginia repeater index into two sections, Virginia and Northern Virginia. We got calls and cards and letters objecting to this. Many of the objections came from repeater owners in Northern Virginia.

We give! It has been put back like it was. All Virginia listings are under a single Virginia heading. T-MARC territory repeaters in Northern Virginia are marked with an "M" in the code column.

Our idea was to keep T-MARC territory repeaters separate in our listings, since we have no authority or territorial rights to them, and it was done solely out of respect for T-MARC.

However, repeater owners and readers, you have spoken, and we have honored your requests. Virginia is back together again.

COACH'S CORNER

Duckie In The Car is a No No

Give me a noisy signal, dropping in and out of the repeater, and the person on the other end acting like he hears the repeater fine, and you have someone who is trying to work the repeater with a rubber duck from within the car.

You hear it everyday, someone trying to make autopatch calls with a signal so bad it's hard to read on another radio, much less through a telephone.

Keep in mind, today's handi-talkies have receivers on them approaching the big mobile rigs as far as sensitivity is concerned, but they have less than 5-10% of the power output.

Then add a rubber ducky on the H/T which is a LOSS when you compare it with a quarterwave antenna, which is the one used for standard of measurement. A duck may be as much as 15 db down below ZERO of a quarter wave. Then you put this duck inside a metal car shell, which probably has 30 db suppression, and you see what kind of signal you're radiating to the repeater antenna.

The biggest boost you can give a H/T in an automobile, is to place it on an outside antenna. Even putting the rubber duck on an outside mount will greatly improve performance over working from inside. But you can get up to 12 or 15 db gain over your outside duck, and up to 30 db over a duck inside the car, by just hooking up to a mobile ⅝-wave antenna.

So, remember, you can make a BIG gun out of your H/T, merely by hooking it on an outside antenna on your automobile.

MIRAGE GIVES YOU POWER!!
Amplifiers for 2M, 6M, 220, 450 From Williams

Ruggedized Amplifiers for Today's Use!

Mirage has the best Warranty in the Industry. 1 Year on Final Devices and 5-year warranty on other components.

Williams can provide a Mirage amplifier for your every need on any VHF/UHF band; at almost any power input and output level. All MIRAGE amplifiers have a one year warranty on RF devices, other components guaranteed for 5 years. Most 2M & 220 Medium and Large models have GaAs Fet pre-amplifiers, and operate all-mode; 12 to 13.8 VDC.

MIRAGE 6M AMPLIFIER (All Mode w/Preamp)
A-1015 - 1/2-10W In = 10-150W Out; (List $316) $269.00

MIRAGE 2M AMPLIFIERS (All Mode; 12-13.8 VDC) ("G" = GaAsfet Preamps)
B-23A - 1/4-5W In = 5-40W Out; (List $142) $129.00
B-23S - 1/4-5W In = 5-40 W. Out; (No Preamps) (List $109) $99.00
B-215G - 1/4-5W In = 38-165W Out; (List $319) $269.00
B-108 - 1/2-15W In = 8-88W Out; (List $196) $159.00
B-1016G - 1/2-15W In = 12-175Out (List $319) $269.00
B-3016G - 1-45W In = 16-175W Out; (List $369) $249.00
B-3030G - 30W in-300W out; (GaAs Mes Fet) $489.00

MIRAGE 220 MHZ. AMPLIFIERS (All-Mode - "G" = GaAsfet Preamps) $129.00
C-211G - 1/4-5W In = 52-126W Out; (List $319) $269.00
C-106 - 1/2-15W In = 5-78W Out; (List $218) $179.00
C-1012G - 1/2-15W In = 7-145W Out, (List $319) $269.00
C-3012G - 1-45W In = 8-135W Out; (List $282) $249.00

MIRAGE 430-450 MHZ. AMPLIFIERS (All-Mode with "N" Conn)
D-15N - 1-2W In = 15W Out, (List $167) $149.00
D-26N - 1-5W In = 17-79W Out; (List $239) $205.00
D-1010N - 1/2-15W In = 12-130W Out; (List $351) $299.00
D-3010N - 10-40W In = 50-130W Out; (List $323) $279.00

MIRAGE WATT/SWR METERS (Peak or Ave. w/3 Pwr. Scales)
MP-1 HF Meter (1.8-30 Mhz) 2,000W; (List $188) $169.00
MP-2 VHF Meter (50-200 Mhz) 1;500W: (List $188) $169.00
MP-3 UHF Meter (420-450 Mhz) (List $214) (Special Order) $189.00
MP-4 UHF Meter (1260-1300 Mhz) (List $227) (Special Order) $199.00

RC-1 Amp Remote Control w/18 foot cable (List $45.00) $39.95

NO Credit Cards. Send check, and add $3.00 shipping. N.C. residents add 5% sales tax. For phone CODs add $3.50. Shipped UPS only. Prices and models subject to change without notice.

Now! Celebrating 15 Years of Service!

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FOR THE BEST DEAL!
(919) 993-5881
NOON TO 10:00 P.M. EST

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Finally. . .A Ham Radio Social Event For The Entire Family!

Saturday May 19

8 Till 4

Farris Memorial Park

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"Somewhere South of Horsepasture, VA. U.S.A."

Picnic at Noon (Bring A Dish)
Tailgating and Flea Market
* Ham Club Expo * Live Music From "The White Horse Band"
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* Amateur TV (B.R.V.D.S.)
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* Media Personalities * R/C Aircraft
270 Acre Recreational Park Complex
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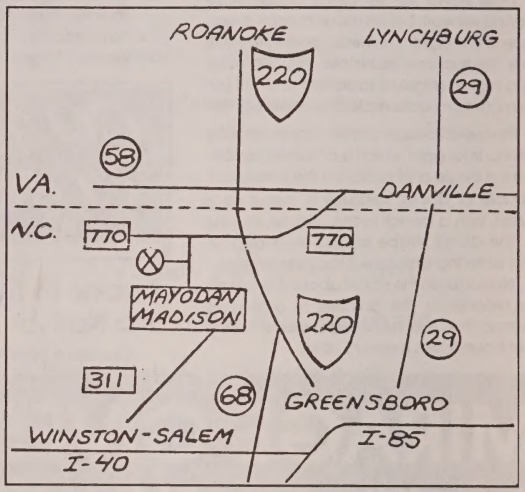
Upgrade Exams at 10:00
Novice Exams at 2:00



Directions: 220 to 770 West. 3.5 Miles on 770 W. 2.5 Miles on Ayersville Rd. South. Turn at Park Rd.

Talk-In: 146.790- 147.390+ 444.900+

Danville W5YI V.E. UPGRADE. Mail copy of current license and any certificates of completion, and a check for $4.95 payable to: Bonnie Manasco, Route 1, P.O. Box 1542, Ringgold, VA. 24586. **Pre-registration must be received by May 16 deadline.** Limited walk-ins. I.D. required.

Prize Tickets: Only $1.00 Each

Tailgating: $2.00 Per Vehicle

Flea Market Tables: (Limited Supply) $4.00 Each

Reserve Tables Before May 12 deadline.

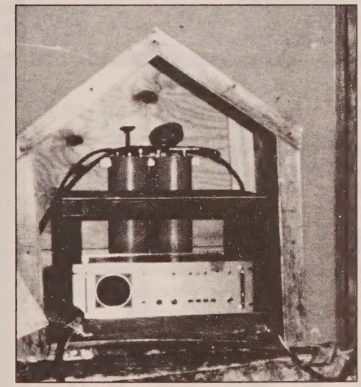
Information: 703-638-7274
703-647-7779

Mail check with S.A.S.E to:

Jim Phillips - AA4QT
P.O. Box 648
Ridgeway, VA 24148

Millers Knob 220 Repeater KC4DWQ

David Martin, KC4DWQ and Don Maples, WD4OBW report their 224.86 repeater is doing fine and picking up users on Millers Knob near Sulpher Springs, TN. The machine is housed in a dog house-like building, which is call "Buzzards Roost." The antenna is strung up in a tree nearby. David said their Traffic/ Traders net every Monday night at 8:00 p.m. has become quite popular.



FCC Moves Beacon Bands on 2M & 440

In its Report and Order of PR Docket 89-65, the FCC agreed with a proposal by the ARRL in petition FM-6512 to move the beacon frequencies.

The new Beacon bands are effective May 18. The rule 97.203 now reads:

(d) A beacon may be automatically controlled while it is transmitting on the 28.20-28.30 Mhz, 50.06-50.08 Mhz, 144.275-144.300 Mhz, 220.05-220.06 Mhz, 222.05-222.06 Mhz or 432.30-432.40 Mhz segments, or in the 33 cm and shorter wavelength bands.

Docket 90-100 Proposes 80-Meter Novice/Tech Change

The FCC has proposed to move the 80-meter Novice and Technician CW segment from 3700-3750 to 3675-3725 Khz. PR Docket 90-100 states that although Novices and Technicians only use CW in this portion of the band, Canadians use voice modes, which results in some interference to the CW operators. The proposed segment is lightly occupied and not subject to voice operation in Canada.

Comments on PR Docket 90-100 are due June 15, and reply comments due July 13.

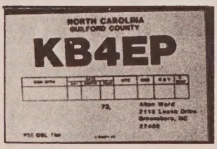
SouthEastern Repeater Association, Inc.

FINANCIAL REPORT FROM JANUARY 1 TO MARCH 31, 1986, 1987, 1988, 1989 and 1990

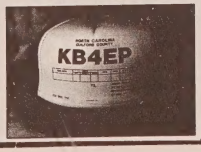
*Ray Adams, N4BAQ

Dues REVENUES	$5/$10 1986	$6/$15 1987	$6/$15 1988	$6/$15 1989	$6/$15 1990
Advertising	$1,486.25	$ 2,789.50	$ 2,618.50	$2,610.00	$ 4,533.10
Associate membership dues	3,090.00	5,053.50	3,682.00	2,812.00	2,075.00
Full membership dues	2,018.50	2,344.00	2,502.00	3,166.50	5,179.50
Decals	10.50	16.00	114.50	31.00	
Postage - included HOT-P	59.50	76.50	58.50	63.00	58.50
Hats	18.00	33.00	18.00	-0-	
Contributions	182.00	102.00	-0-	122.10	
Interest	46.76	111.40	147.68	70.89	98.01
Other	58.39	11.50	6.00	-0-	64.00
	$6,969.90	$10,537.40	$ 9,147.18	$8,875.49	$12,008.11
EXPENSES					
Journal mailing	$1,166.09	$ 756.14	$ 563.47	$1,510.21	$ 749.75
Journal printing	2,952.13	4,821.29	3,778.31	4,927.53	4,571.37
Travel and meetings	962.84	1,250.70	-0-	1,489.57	648.96
Miscellaneous	-0-	59.95	25.00	95.75	94.00
Office expenses	-0-	35.00	49.20	230.64	97.58
Postage - other than journal	94.16	38.38	225.02	851.81	337.16
Printing - other than journal	-0-	284.00	35.64	312.96	-0-
Telephone	138.54	78.68	243.49	256.00	252.93
	$5,313.76	$ 7,324.14	$ 4,920.13	$9,674.47	$ 6,751.75
REVENUES OVER (UNDER*) EXPENSES	$1,656.14	$ 3,213.26	$ 4,227.05	$ 798.98*	$ 5,256.36
Balances, Beginning of year					
Expenses advanced	$ 950.00	$ 900.00	$ 900.00	$ 900.00	$ 900.00
Invested in office machines	896.00	2,571.63	1,696.00	3,026.00	3,203.60
Cash in bank	2,107.05	5,690.15	7,252.05	5,393.35	4,156.54
	$3,953.05	$ 9,161.78	$ 9,848.05	$9,319.35	$ 8,260.14
EQUITY TO ACCOUNT FOR	$5,609.19	$12,375.04	$14,075.10	$8,520.37	$13,516.50
Less: Expenses advanced	$ 300.00	$ 900.00	$ 900.00	$ 900.00	$ 900.00
Invested in office machines	896.00	2,571.63	3,053.29	3,026.00	3,203.60
	$1,196.00	$ 3,471.63	$ 3,953.29	$3,926.00	$ 4,103.60
CASH IN BANK	$4,413.19	$ 8,903.41	$10,121.81	$4,594.37	$ 9,412.90

Your QSL Card On a Mug - $5.95



Or a Cap! $4.95



(Available in Red, Blue, Black, Brown, or Green)

Please create me: (Specify cap color:)_____

___ Mugs @ $5.95 each ..... _____

___ Caps @ $4.95 each..... _____

___ **Cap & Mug special @ $8.95** .. _____

NC Residents add 5% sales Tax..... _____

Shipping and Handling ..... $ 3.00

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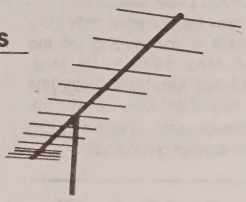
KLM BEAMS AND ANTENNAS

6M thru 450 Mhz. Antennas IN STOCK!

ANTENNAS FOR 2-Meters

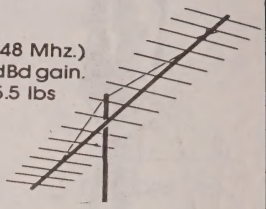
2M-13LBA
144-148 Mhz., 13 elements with 13.3 dBd gain. Boom Length is 21.5 feet. 9 lbs., 2-in mast.

List Price - $95.00
Sale Price - $89.95



2M-11X
144-146 (usable 143.148 Mhz.)
11 elements with 12.5 dBd gain.
Boom Length 15.4 ft. 5.5 lbs

List Price - $84.00
Sale Price - $79.95



Suitable for Use Horizontal or Vertical!

KLM Antennas are Second to None in Performance! KLM gain figures are based on the National Bureau of Standards, as expressed in dBd and dCd. Some manufacturers express gain of their antennas in Isotrophic or other non-standard sources, which will make their gain figures look higher than KLM.

ANTENNAS FOR 2-Meters

2M-11X - 11 ele., 12.5 dBd-15.3' Boom (List $87) $79.95
2M-13LBA - 13 ele.; 13.3 dBd-21.5' Boom (List $99) $89.95
2M-16LBX - 16 ele., 13.2-14.5 dBd-28' Boom (List $202) $169.95
2M-8 - 8 elements, 10.3 dBd-7.25' Boom (List $102) $89.95
2M-4X - 4 elements (end mt.) 8.5 dBd-4.2' Boom (List $64) $59.95

2-METER CIRCULAR POLARIZATION

2M-22C - 22 elements; 13 dBdc-19' Boom (List $221) $189.95
2M-14C - 14 elements, 11 dBdc-12.75' Boom (List $170) $149.95

2-METER VERTICALS

JV-2 60-in. tall; 144-148 Mh. 5 db/gr pl (List $116) $99.95
JV2X 11-ft. tall; 144-148 Mh. 7 db/gr pl (List $159) $135.95

220 Mhz. BEAMS

220-7 - 7 elements, 8.8 dBd-4.75' Boom (List $79) $69.95
220-14X - 14 elements, 13.5 dBd-14.5' Boom (List $113) $99.95
220-22LBX - 22 elements, 15.6 dBd-29.75' Boom (List $142) $129.95
JV-220X - 88-in Tall VERTICAL 7 dB/gr pl (List $146) $129.95

432 BEAMS

432-20 LBX - 20 elements, 15.3 dBd-12.3' Boom (List $151) $129.95
432-30 LBX - 30 elements; 17.3 dBd-22' Boom (List $175) $149.95

435 CIRCULAR POLARIZATION BEAMS

435-18C - 18 ele. 12 dBdC, w/CS-2 sw-7.3' Boom (List $222) $189.95
435-40CX - 40 ele. 15.2 dBdC-175.5" Boom (List $259) $219.95

440-450 FM BEAMS

440-6X - 6 elements; 8.9 dBd-2' Boom (List $57) $55.95
440-10X - 10 elements, 10.2 dBd- (List $68) $65.95
440-16 - 16 elements, 11.5 dBd (List $125) $115.95
JV-440X - 420-470 VERTICAL, 7 db/gr pl. (List $122) $109.95

6-METER ANTENNAS

JV-6 - 6-Meter, 50-54 Mhz. 15' Tall-5 db/gr pl. (List $109) $89.00
6M-5 - 5 elements; 9.7 dBd-11.75' Boom (List $209) $175.95
6M-7LB - 7 elements; 11.5 dBd-25.75' Boom (List $304) $254.95

CJ SERIES 1.8 dBd; CLOSED LOOPS

CJ2M (2M) . $33.00 CJ220M (220 Mhz) $32.00 CJ440 (440 Mhz) . . $29.00

HF TRI-BAND BEAMS 10-15-20M (Special Order-10 Days)

KT-34A TRI-BAND 7 dBd; 4 el-16 ft boom (List $501) $419.00
KT-34XA TRI-BAND 8.5-11.3 dBd; 6 el (List $723) $599.00
SHIPPING: KT-34A, UPS ..... $21.00 KT-34XA; Truck ..... approx. $70.00

Also available from KLM & Williams (Special order. Tailor to your needs). Phasing/Stacking Harnesses, "H" Stacking frameworks, baluns, sleeve baluns, coaxial baluns, antenna couplers/power dividers, ferrite baluns.

NOTE; Prices for UHF/VHF (In Stock) antennas plus UPS shipping or freight. (Approximately $5.00). All HF beams will be drop-shipped from the factory, by truck and freight will be billed C.O.D. Delivery within 10 days to 2 weeks. Prices subject to change without notice. N.C. residents add 5% Sales Tax. NO CREDIT CARDS. For Phone CODs add $3.50

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"The View From The Peak"

Duty With A Colorado State Trooper

— by George Hinds, N8CIX

One Pikes Peak area amateur from the local club in Teller County, Colorado was allowed to ride along with a trooper recently. While special permission was required, our record of help on several occasions to local law officers was noticed and rewarded.

What's it like to ride with a state trooper? Interesting, indeed. The primary responsibility of the Colorado State Patrol is road patrol and traffic law enforcement. Soon after the tour of duty commenced, our ham rider learned a lesson — it's not smart to risk your privilege of having a driver's license on a radar detector to always save one from speeding tickets — that may be a losing proposition. The very first stop made of a speeder was a car with a radar detector on the dash! Try staying within the speed limit instead and save money! Troopers work with "Vascar"; "instant-on" radar, and are often aided by aircraft. **Would you believe: 50% of speeding tickets issued are to drivers using so-called "radar detectors."**

The trooper demonstrated uncanny accuracy in calling out the estimated speed of cars and trucks rolling down the highway, then snapping on the radar to verify his estimate — time after time guessing to within a mile or two the speed of the approaching vehicle, even when in motion. This fellow has been a state trooper for 23 years; all in the Pikes Peak region of Colorado. He knows every nook and cranny in his territory, where the elevation can vary from 6,000′ to 14,000′. Troopers take their job seriously; it was evident they don't write tickets unless the violation(s) warrants and, when it does warrant a ticket, it's issued. It was clear to the ham rider that speeding, recklessness, etc., in the Colorado mountains is not tolerated.

"It's tough to cite people who are obviously decent citizens, but I've seen too often what happens in accidents when otherwise good people forget or ignore sound judgement and common sense in driving," the trooper commented. "A citation today may prevent my being dispatched to complete an injury or fatality accident report on them tomorrow." During the hours on patrol, several traffic stops were made and citations issued. It became clear in the first hour that if a traffic stop was called for, a ticket was going to be issued. At all times the patrolman was polite and easy-going in manner, but very professional and firm in his contact with those pulled over. When the ham rider commented on how polite the officer was, the reply came: "I try to treat people with respect as I expect to be treated by them; some few times a person won't let you do that, and then I deal with it as best I can." After 23 years, you can bet he's heard all the excuses in the book!

As the evening wore on, a motorist was pulled over for crossing the center line and weaving; a possible drunk driver. It was necessary to take him in for a test at Woodland Park PD; upon getting the results, it was then to jail for drunk driving at the county seat about 25 miles distant at the old gold mining town of Cripple Creek. Almost three hours were spent in this procedure. Then back on patrol again.

The shift ended at 11 p.m. and the ham rider was dropped off. Because of the shortage of personnel, our trooper was at home but on call for another four hours in case of emergency. There is no such luxury as a two-man car, day or night, despite the wild and lonely territory covered where help is often far away should a trooper get in trouble. Neither does the trooper have a walkie-talkie and an in-car mobile repeater to rely on when stepping away from the car at a traffic stop. These ever-present dangers have resulted in close cooperation between state patrol officers and other law enforcement people. With multi-channel scanning radios in most cars this inter-dependence is made easier. It's a very hazardous job at times when just one trooper may be on duty to cover parts of three mountain counties; over 8,000 square miles of potential trouble.

It's Coming!

LABOR DAY WEEKEND

The Granddaddy of Them All!

SHELBY N.C. HAMFEST

SEPTEMBER 1 - 2, 1990

Watch For More Details in the August Repeater Journal!

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MAIL CHECK, ORDER with SASE to: SHELBY RADIO CLUB, P.O. BOX 2206, SHELBY, N.C. 28150.

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August 11 & 12, 1990

Saturday 9:00 am – 5:00 pm Sunday 10:00 am – 2:00 pm

National Guard Armory, High Point, NC
off Business I-85, Hwy 29-70

Talk in: 147.765/.165

Prizes: First, Second, Preregistration
HPARC member not eligible

Tickets: $4.00 in advance/$5.00 at gate
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For advance tickets, mail checks payable to:

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Jamestown, NC 27282

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Hamfest Information
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8: A.M. TO 4: P.M.

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EXAMS BEGIN 10: A.M.

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By preregistration until September 24. Send completed Form 610, photocopy of your current license, code/theory certificates (if applicable), indicate highest class of license you desire to be tested for, and a check or money order for $ 4.95 Payable to JARS to:

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COACH'S CORNER

— by Carlton Moseley, W4YVY

Inexpensive Dial Lamp Replacement For KDK FM-2033

The KDK FM-20332-meter rig was designed to use two tiny 2.5 volt wheat grain-sized lamps, wired in series for backlighting the liquid crystal display (LCD). These lamps were very expensive, I found out when they are available. I devised an inexpensive repair to solve the problem of no backlighting on my KDK, and thought it might be nice to share it with my fellow SERA Journal readers.

Procedure

The top and bottom covers and the front panel of the KDK FM-2033 must be removed. Centered behind the front panel is a metal frame about ¾-inch by 1½-inch, which holds the LCD unit. This frame is mounted on a printed circuit board, and must be removed from the board.

For removal of the LCD box, first spread open a little bit, the tab on top of the metal frame that hooks over the circuit board. Next, pull the bottom of the metal frame away from the circuit board. After pulling the bottom of the metal frame out, two tabs, one on each side of the frame, will clear the mounting holes. The frame can now be lifted up and removed from the circuit board. The two tiny lamps should be removed from the printed circuit board.

The metal frame just removed contains the dial display. In back of this frame is a block of snug fitting clear plastic, with a piece of white tape on it. Light shining into the side of the plastic gives the back light for the LCD readout. This plastic block will slide and should be pushed all the way to one side (either left or right). This will leave a large gap on one side between the plastic and the metal frame. This gap will hold a Radio Shack lamp, catalog number 272-1141. This is a 12-volt, 25 ma. lamp with 4-inch leads and sells for less than a dollar.

Place the new lamp in the gap and bring the leads out. They can be routed out through the opening that one of the old lamps was in, or a small notch opening can be made in the metal frame, just below where the lamp is placed. The lamp leads should be routed to the underside of the radio, so that power connections can be made.

One lead of the new lamp should be soldered to a chassis ground. Use the white lamp lead if you wish. The other lead should be connected through a small signal diode (1N34 type) to the on-off switch to obtain power. A diode is used in series with the lamp to reduce the voltage applied to the lamp and make the lamp last longer. The lamp will give very good illumination with one diode in series. Two diodes in series will extend the lamp life, but with a bit less illumination. If desired though, the lamp may be connected directly to the power switch. Either way, make sure that all leads are insulated to prevent a short circuit. Also, if a diode is used, make sure it is connected in the correct polarity.

Re-Assembling

In re-assembling the unit, hook the top of the metal frame over the top of the printed circuit board and then put the side and bottom tabs in place. At this point, the rig should be turned on to make sure the dial display works properly.

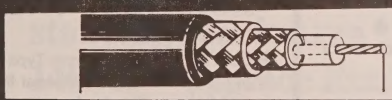
The metal frame LCD unit MUST make good contact at the top of the printed circuit board so that all elements of the LCD will function properly and light. Make sure the metal frame is tight against the circuit board. This will guarantee proper display.

Replace the front panel, put the top and bottom covers back on, tighten up the screws, and your job is finished. You have saved several bucks, and probably lengthened the life expectancy of your new bulb (if you used diodes).

The 220 Mhz, FM-4033, and the 440 Mhz FM7033 KDKs are the same, as far as the lamps and their replacement is concerned.

SERA Membership Address

The Address for sending Full or Associate Membership applications is: SERA Membership, P.O. Box 215, Tobaccoville, N.C. 27050



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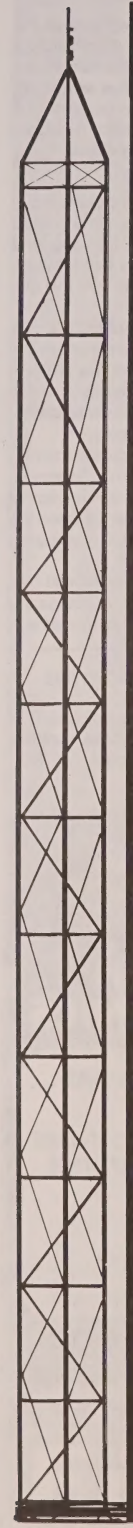

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In addition to a large stock of straight tower sections, we also have flat and sleeved top sections, thrust bearings, house brackets, short base sections, rotor plates, guy assemblies, guy wire, cable clamps, turnbuckles – you will need for a complete tower installation.

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15 Oz. can Scotchkote coating . . . $10.00

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The fastest and most reliable connections for buried or above ground rods. This system provides a molecular bond that can't loosen, can't corrode, isn't subject to galvanic corrosion, and is capable of carrying more current than the grounding conductor itself. West Antenna Corporation can supply and install ground systems for commercial tower sites.

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2-way shops are urged to check for Dealer Pricing.

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PL-259 Connectors (U.S. Made) . .65¢
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Aluminum mast pipes, feature 2 inch OD 6061 tubing with ¼ inch wall.

12 foot lengths, 19 lbs. - In Stock
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Touch rust spots on your tower and antenna bolts with RUSTOLEUM, cold galvanizing.

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#10 wire . . . 30¢ per foot
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FUSE BLOCKS - Our fuse blocks are rugged, holding fuses much larger than the little 3AG glass type. This prevents overheating and voltage loss with high currents. Set screws in end of fuse blocks will accept wire up to #6.

30AMP Fuse Block $4.95
60AMP $5.95

Fuses - 5,6,7,8,10,20,25,30 Amp . . . . . 80¢ each
35,40,45,50 & 60 Amp. Fuses also available upon request.

RELAYS - These Motorola Type A style relays can be installed near the fuse block in the fenderwell and remotely switched under the dash with a small toggle switch. Excellent for switching high current lines. Relays are a closed type with screw terminals for mounting . . . . . Special $13.95

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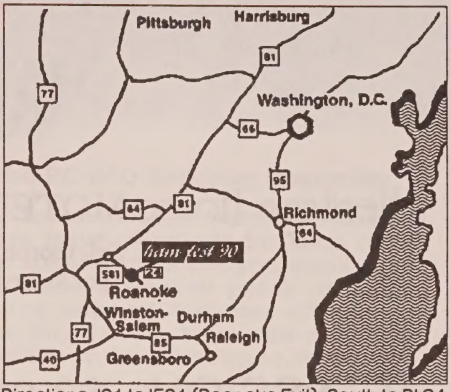

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1st Prize - Kenwood 440 Transceiver

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For information: **R.V.A.R.C.**, Bob Denton, AB4SD, Hamfest '90 Committee Chairman, 6227 Saddleridge Road, Roanoke, VA 24018 Tel: 703-772-3022 FAX: 703-772-2956

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AND

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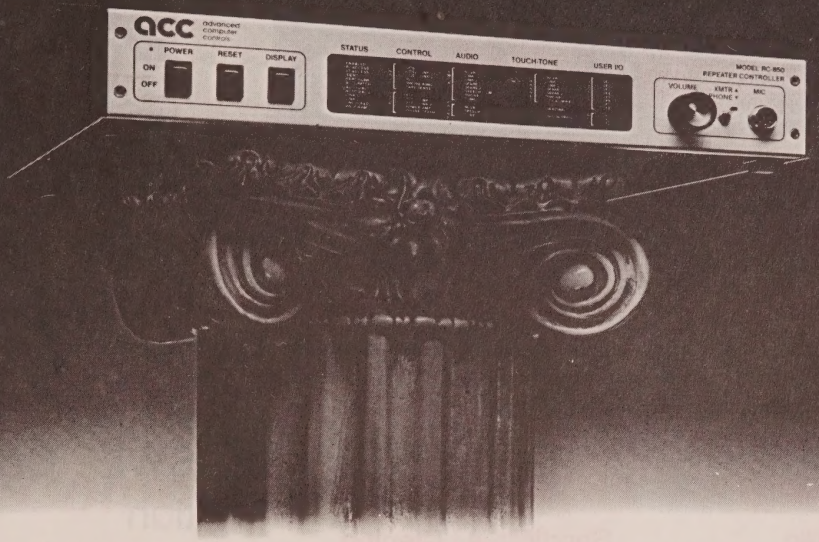

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- Scheduled for Sunday morning, at 0900 - 1300
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Flea Market

The Flea Market is one of the largest on the Coast. No matter what you are looking for, you will probably find it here!

ShortWave Listening

This years convention will host ***ANARCON '90,*** the annual convention of the Association of North American Radio Clubs. **ANARC** is an association of the major SWL Clubs throughout North America, whose interests include SW Broadcast, Utilities, Scanners, Pirate Radio and much more!

Major International Broadcasters will be here to answer your questions about their stations. Experts in the fields of antennas, interference, communications and others will present forums on various aspects of this popular hobby!

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- ✓ ARRL Roanoke Division Convention!
- ✓ ANARC 1990 SWL Convention
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WHERE TO BUY DIRECTORY

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F & M ELECTRONICS Greensboro, NC	DEALERS: Write the Editor about the Special Repeater Journal Resale Dealer Package.

The Case of The $400 Tree

— by Bill Brazelton, WA4USW
Fm Knoxville Rep.Grp., Inc.

Recently a wind storm raced through Knoxville in the early afternoon. At about 1:30 p.m. the repeater went on standby power. A call-up of wind speed telemetry showed that the highest speed recorded that day (62 mph) occurred at exactly the same time. A quick trip halfway up the ridge ended our guesswork. A large dead tree, about 2 feet in diameter at the base, had fallen squarely across our power line, breaking it.

Gene Bean WD4KXH, (now a silent key) had originally strung our power line. In times past, he had generously lent us equipment needed to maintain the line, and was always available for consultation, but now we were on our own.

About $400 bought us climbing spikes, a crimping tool, and compression sleeves necessary to repair the line. While Robin, WA4TEM reconnected the wire, Glen Thompson, N4CKF and I proceeded to take a chain saw to the culprit tree and get it out of the way. In a fit of chain saw frenzy, Glenn and I cut several more trees that could have given us problems in the future.

If you want to see what a $400 tree looks like, just take a hike up the repeater trail. Its pieces are about halfway up.

A lot of repeater money is spent on items other than radio equipment, but in the future this support equipment will ensure operation even through difficult times.

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REPEATER JOURNAL

Coming Events

SERA REPEATER JOURNAL CALENDAR OF EVENTS

MAY, 1990

5-6 ..... 51st Annual Hamfest, GREENVILLE, SC
13 ..... 0th RVARC Mayfest, ROANOKE, VA
19-20 ..... Hamfest, BIRMINGHAM, AL
20 ..... TSRAC Hamfest, WHEELING, WV
26 ..... DurhamFest, DURHAM, NC

JUNE, 1990

1-2 ..... ARRL GA. State Conv/Hamfest, ALBANY, GA
2 ..... 24th Annual Hamfest, KNOXVILLE, TN
2 ..... Athens RC Annual Hamfest, ATHENS, GA
2-3 ..... Clev. ARC Starfest, CLEVELAND, TN
3 ..... Hamfest, MANASSAS, VA
8-10 ..... ARRL Nat'l Conv. KANSAS, CITY, MO
9 ..... Hamfest, WINSTON-SALEM, NC
30 ..... Hamfest, BLUEFIELD, WV
30-Jul 1 ..... WV St.ARRL Conv. JACKSON'S MILL, WV

JULY, 1990

7-8 ..... HamFestival, ATLANTA, GA
21 ..... Summer Swapfest, CARY, NC
28-29 ..... WCARS Hamfest, ASHEVILLE, NC

AUGUST, 1990

4-5 ..... 17th Hamfest, JACKSONVILLE, FL
5 ..... 40th Winchester Hamfest, BERRYVILLE, VA
11* ..... Hamfest, PARKERSBURG, WV
11-12* ..... ARK-LA-TEX Hamfest, SHREVEPORT, LA
11-12 ..... 2nd High Point RC Hamfest, HIGH POINT, NC
12* ..... Central Ky Hamfest, LEXINGTON, KY
12* ..... Central ARRL Hamfest, GEORGETOWN, KY
18-19 ..... SE Div.ARRL Conv/Hamfest, HUNTSVILLE, AL
25-26 ..... Hamfest, MADISON, GA
25-26* ..... Computerfest 90, DAYTON, OH
26* ..... Hamfest, CEDARS OF LEBANON, TN

SEPTEMBER, 1990

1-2 ..... 33rd Annual Hamfest, SHELBY, NC
8-9* ..... Hamfest, MELBOURNE, FL
8-9* ..... Hamfest, MOBILE, AL
8-9* ..... Hamfest, LOUISVILLE, KY
9* ..... Foundation AR Hamfest, GAITHERSBURG, MD
15-16 ..... Roa.Div.ARRL/Hamfest-Comp VIRGINIA BEACH, VA
15-16* ..... Cincy Hamfest, CINCINNATTI, OH
16* ..... Hamfest, CLEVELAND, OH
22* ..... Hamfest, SPRUCE PINE, NC
23* ..... Hamfest, Lanierland ARC, GAINSVILLE, GA
29 ..... Hamfest, ANNISTON, AL
29* ..... TARA, Hamfest, HUNTINGTON, WV
29-30* ..... Hamfest, BILOXI, MS
30 ..... 2nd Annual JARSFEST, BENSON, NC

OCTOBER, 1990

6* ..... Hamfest, ROME, GA
6-7 ..... Hamfest, BILOXI, MS
7 ..... Hamfest, ROCK HILL, SC
13-14 ..... "Memfest '90" Hamfest, MEMPHIS, TN
12-14* ..... 11th Ham Com-Vention, HOUSTON, TX
13-14 ..... 37th Hamfest/Computer Show, AUGUSTA, GA
13 ..... Hamfest, W.PALM BEACH, FL
14* ..... 13th Annual CARA Hamfest, HOWARD CTY, MD
14* ..... Hamfest, MAYSVILLE, NC
20 ..... Triangle East ARA Hamfest, SMITHFIELD, NC
20 ..... Tri-Cities Hamfest, GRAY, TN
20-21* ..... Central Ga.Hamfest, WARNER ROBBINS, GA
27 ..... Hamfest, SUMTER, SC
27-28 ..... Hamfest,CHATTANOOGA, TN

NOVEMBER 1990

3-4 ..... Ham Radio/Comp.Expo '90, LAWRENCEVILLE, GA
10 ..... 13th Annual Hamfest, MONTGOMERY, AL
10-11* ..... Hamfest, FT. LAUDERDALE, FL
11* ..... Hamfest, CONCORD, NC
17-18 ..... Suncoast Conv. '90 TAMPA, FL
24-25* ..... Hamfest, GREENSBORO, NC

(Please note: Hamfest dates marked with an asterisk(*) are NOT confirmed. Hamfest sponsors are urged to get their correct show dates to the Repeater Journal editor as soon as possible. Unconfirmed dates are based on information from the previous year's show date. The Repeater Journal assumes no responsibility or liability for incorrect dates, whether they be from lack of information, or from typographical errors in typesetting and printing.)

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6M-10

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Gain	11.7 dBd	Element Length	116″
VSWR @ 50.1	less than 1.2 to 1	Boom Size	2″ o.d. × 34′ 3½″
Front-to-Back	26 dBd	Turn Radius	21¾′
Feed Impedance	50 Ohms	Windload	4.4 sq. ft.
Balun	4:1, 5kw PEP	Weight	29 lbs.
Wavelength	1.74	Mast	2″

6M-14

ELECTRICAL		MECHANICAL	
Bandwidth	50-52 MHz	Elements	14
Gain	14.0 dBd	Element Length	116″
VSWR @ 50.1	less than 1.2 to 1	Boom Size	3″ o.d. × 61′
Front-to-Back	25 dBd	Turn Radius	35½′
Feed Impedance	50 Ohms	Windload	10 sq. ft.
Balun	4:1, 5kw PEP	Weight	43 lbs.
Wavelength	3.10	Mast	2″

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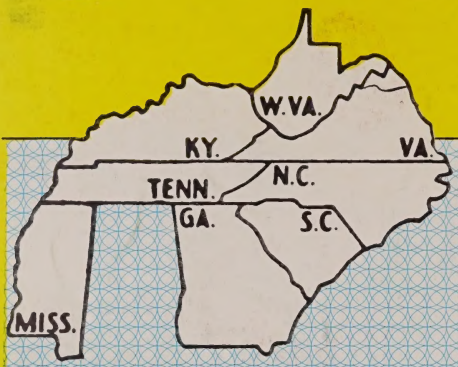

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